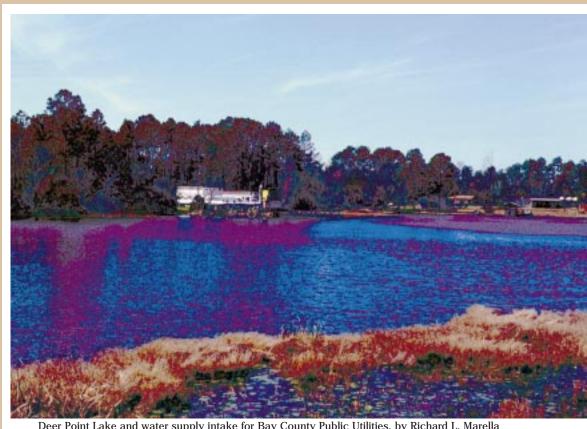
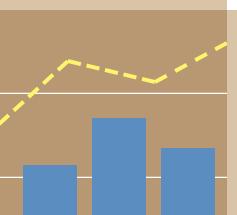


Water Use Trends and Demand Projections in the Northwest Florida Water Management District



Deer Point Lake and water supply intake for Bay County Public Utilities, by Richard L. Marella



U.S. GEOLOGICAL SURVEY Open-File Report 98-269

Prepared in cooperation with the Northwest Florida Water **Management District**

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By Richard L. Marella, Michael F. Mokray, and Michael Hallock-Solomon

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U.S. DEPARTMENT OF THE INTERIOR BRUCE BABBITT, Secretary

U.S. GEOLOGICAL SURVEY
Thomas J. Casadevall, Acting Director

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CONVERSION FACTORS, ABBREVIATIONS AND ACRONYMS

Multiply	Ву	To obtain
acre	4,047	square meter
acre	0.00156	square mile
square mile	2.59	square kilometer
gallons per day (gal/d)	3.785	liters per day
million gallons per day (Mgal/d)	0.003785	million cubic meters per day
acre feet	0.325851	million gallons (Mgal)

AFSIRS = Agricultural Field Scale Irrigation Requirements Simulation

ASC = Areas of Special Concern

BEBR = Bureau of Economic and Business Research

CRV = Coefficient of Relative Variation

FDEP = Florida Department of Environmental Protection

IFAS = Institute of Food and Agricultural Science

MAPE = Mean Absolute Percentage Error

MOR's = Monthly Operating Reports

MSE = Mean Standard Error

NWFWMD = Northwest Florida Water Management District

SEE = Standard Error of the Estimate

USBC = U.S. Bureau of the Census

USGS = U.S. Geological Survey

Water Use Trends and Demand Projections in the Northwest Florida Water Management District

By Richard L. Marella, Michael F. Mokray, and Michael Hallock-Solomon

Abstract

The Northwest Florida Water Management District is located in the western panhandle of Florida and encompasses about 11,200 square miles. In 1995, the District had an estimated population of 1.13 million, an increase of about 47 percent from the 1975 population of 0.77 million. Over 50 percent of the resident population lives within 10 miles of the coast. In addition, hundreds of thousands of visitors come to the coastal areas of the panhandle during the summer months for recreation or vacation purposes. Water withdrawn to meet demands for public supply, domestic self-supplied, commercial-industrial, agricultural irrigation, and recreational irrigation purposes in the District increased 18 percent (52 million gallons per day) between 1970 and 1995. The greatest increases were for public supply and domestic self-supplied (99 percent increase) and for agricultural irrigation (60 percent increase) between 1970 and 1995. In 1995, approximately 70 percent of the water withdrawn was from ground-water sources, with the majority of this from the Floridan aquifer system. The increasing water demands have affected water levels in the Floridan aquifer system, especially along the coastal areas. The Northwest Florida Water Management District is mandated under the Florida Statutes (Chapter 373) to protect and manage the water resources in this area of the State. The mandate requires that current and future water demands be met, while water resources and waterdependent natural systems are sustained.

For this project, curve fitting and extrapolation were used to project most of the variables

(population, population served by public supply, and water use) to the years 2000, 2005, 2010, 2015, and 2020. This mathematical method involves fitting a curve to historical population or water-use data and then extending this curve to arrive at future values. The population within the region is projected to reach 1,596,888 by the year 2020, an increase of 41 percent between 1995 and 2020. Most of the population in this region will continue to reside in the urban areas of Pensacola and Tallahassee, and along the coastal areas. The population served by public water supply is projected to reach 1,353,836 by the year 2020, an increase of nearly 46 percent between 1995 and 2020.

Total water demand for the Northwest Florida Water Management District is projected to reach 940.2 million gallons per day in 2000, 1,003.1 million gallons per day in 2010, and 1,059.1 million gallons per day in 2020. Excluding water withdrawn for power generation from these totals, water demands will increase 34 percent between 1995 and 2020, and 58 percent between 1970 and 2020. Specifically, public supply demands are projected to increase 74.1 million gallons per day (53 percent) and domestic selfsupplied and small public supply systems demands are projected to increase 9.1 million gallons per day (28 percent) between 1995 and 2020. Commercial-industrial self-supplied demands are projected to increase about 16.9 million gallons per day (13 percent) between 1995 and 2020. Agricultural and recreational irrigation demands combined are projected to increase 16.8 million gallons per day (48 percent) between 1995 and 2020. Water demands for power generation are

projected to increase about 53.9 million gallons per day (10 percent) between 1995 and 2020. Although power generation water use shows a projected increase during this time, plant capacities are not expected to change dramatically.

INTRODUCTION

The Northwest Florida Water Management District (NWFWMD) is located in the western panhandle of Florida (fig. 1) and encompasses about 11,200 square miles (mi²) (Fernald and Patton, 1984). In 1995, the District had an estimated population of 1.13 million (Marella, in press), an increase of about 47 percent from the 1975 population of 0.77 million (Marella, 1995). Over 50 percent of the resident population lives within 10 miles of the coast. In addition, hundreds of thousands of visitors come to the coastal

areas of the panhandle during the summer months for recreation and vacation (Florida Department of Commerce, 1995). This area of Florida depends on tourism, silviculture (pulp and lumber production), paper and chemical manufacturing, government and military, and some agriculture. Several large chemical plants, paper mills, and military installations, universities, and the Capital City of Tallahassee are located within this area of the State. Water withdrawn to meet demands for public supply, domestic self-supplied, commercialindustrial, agricultural irrigation, and recreational irrigation purposes in the District have increased 18 percent (52 million gallons per day) (Mgal/d) between 1970 and 1995. The greatest increases were for public supply and domestic self-supplied (99 percent increase) and agricultural irrigation (60 percent increase) between 1970 and 1995. Water withdrawn for commercial-industrial purposes decreased 26 percent during this period. In 1995, approximately 70 percent of the water withdrawn for these purposes within the

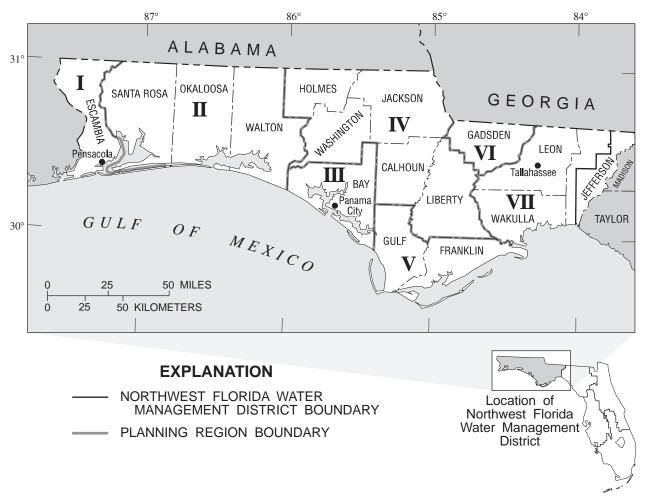


Figure 1. Location of the Northwest Florida Water Management District and the seven designated Planning Regions.

NWFWMD was from ground-water sources, with the majority of this from the Floridan aquifer system (Marella, in press). The increase in water demands has affected water levels in the Floridan aquifer system, especially along the coastal areas (Fernald and Patton, 1984; and Mahon and others, 1997). The NWFWMD is mandated under the Florida Statutes (Chapter 373) to protect and manage water resources in this area of the State. The mandate includes meeting current and future demands while ensuring that adequate amounts of water remain available to sustain water resources and water dependent natural systems. To help accomplish this goal, the U.S. Geological Survey (USGS), in cooperation with the NWFWMD, assessed current water uses and estimated future water needs.

Purpose and Scope

This report documents the methodology and results of a study conducted during 1997 and 1998 for the purpose of projecting water use for 16 counties and seven Planning Regions in Northwest Florida. The objectives of this study were to 1) inventory existing water users, 2) project water demand for public supply, domestic self-supplied use, commercial-industrial selfsupplied use, recreational irrigation (golf courses), and power generation for each county in the seven Planning Regions, and 3) project water demand for specific water users within the NWFWMD. Using 1995 as a base year, average annual water-use projections were made for the years 2000, 2005, 2010, 2015, and 2020. Projections of agricultural irrigation water demands were supplied by the University of Florida, Institute of Food and Agricultural Science (IFAS), specifically for this project. Information concerning current and future instream water use (nonwithdrawal), such as navigation, water-based recreation, propagation of fish and wildlife, and dilution and conveyance of liquid or solid wastes, is not included in this report.

The data presented in this report for 1995 were collected and compiled specifically for this project. Data sources include the Florida Department of Environmental Protection (FDEP), NWFWMD, USGS, and individual users. Because of different sources of data and terminology differences between agencies, the wateruse data published in this report may differ from the water-use data presented in other reports. Historical water-use values (1970-90) for public supply, domestic self-supplied, commercial-industrial self-supplied and power generation were obtained from Marella (1995).

Historical water use values for agricultural irrigation were obtained from Moss and de Bodisco (1998); however, historical water-use values for recreational irrigation were not available. Water-use values for this report do not include estimates for livestock or fish farming or for residential lawn watering. Data presented for Jefferson County represent all of the county, not just the portion within the NWFWMD. Values presented in this report represent all water use, including fresh and saline.

Approach

The project was divided into three tasks. Task 1 included compiling an inventory of public supply, commercial-industrial self-supplied, recreational irrigation, and power generation water users for 1995. Data were summarized by county for the following water supply Planning Regions: I) Escambia County, II) Okaloosa, Santa Rosa, and Walton Counties; III) Bay County; IV) Calhoun, Holmes, Jackson, Liberty, and Washington Counties; V) Franklin and Gulf Counties; VI) Gadsden County; and VII) Jefferson, Leon, and Wakulla Counties. For each Region, the larger users were inventoried to determine the amount withdrawn, peak day (annual maximum daily flow), peak month, peak three months (consecutive), water source, permitted amount, population served, service connections, and other information (including water purchased, sold, or lost, water sources, and utility interconnections).

A summary of water conservation efforts and reuse efforts by users was compiled for this report and is presented in appendix 1. Service areas for selected public suppliers were obtained from the utility companies and were digitized and provided to the District as an ARC/Info coverage. Historical data (1975-94) were compiled from past and existing data bases, hard copy files, and water use publications and were provided to the District on a CD-ROM disk. A questionnaire for current water uses (1995 or 1996) and projected demands was developed and mailed to selected public supply, commercial-industrial, power generation, and golf course water users (app. 2). Data obtained from the questionnaires and the historical compilation were used as a baseline for the projections presented in this report.

Task 2 included making water-use projections for the years 2000, 2005, 2010, 2015, and 2020 for the seven Planning Regions, based on the categories of public supply, domestic self-supplied (including small public supply systems), commercial-industrial self-

supplied, power generation, and recreational irrigation (golf courses). A methodology was chosen and presented to the District staff for acceptance (app. 3). Water-use projections were totaled and summarized by county and by Planning Region. Agricultural irrigation water use projections were provided by IFAS and were included in the county and Planning Region totals.

Task 3 included providing detailed data for specific users in five designated Areas of Special Concern (ASC). The five designated areas are (in order of priority): 1) southern Okaloosa, Santa Rosa, and Walton Counties, 2) southwestern Gulf County (Port St. Joe/Mexico Beach), 3) southern (coastal) Franklin County, 4) southwestern Bay County (Panama City Beach), and 5) central Gadsden County. Within these areas, detailed projections were made for specified utilities, commercial-industrial facilities, and golf courses. Water-use projections were totaled and summarized by ASC and non-ASC areas.

Previous Investigations

Several reports have been published that identify current water use and projected demands for this area of Florida. Historical water-use inventories for the NWFWMD were published for 1980 (Kranzer, 1983) and 1985 (Bielby, 1987) and data for the District can be found in statewide reports for 1975 (Leach, 1978), 1977 (Leach and Healy, 1980), 1980 (Leach, 1983), 1985 (Marella, 1988), 1990 (Marella, 1992a), and 1995 (Marella, in press). Water-use data on public suppliers have been published for 1970 (Healy, 1972), 1975 (Healy, 1977), 1980 (Northwest Florida Water Management District, 1981), 1987 (Marella, 1990), and 1990 (Marella, 1993), and in other reports such as Wagner and others, 1980; Barrett Daffin and Carlan, Inc., 1982; Richards, 1993; and May and Casella, 1997. Projections of future water demands for individual users and county totals were published in Barrett Daffin and Carlan, Incorporated, 1982; Marella, 1992b; Richards, 1993; and May and others, 1997.

Acknowledgments

The USGS gratefully acknowledges the FDEP, Northwest District Office in Pensacola for its cooperation in providing access to the drinking water Monthly Operating Reports (MOR's) files. Special thanks are extended to the following individuals from the Northwest District Office who provided data or technical assistance: Kimberly Allen, Scott Grubbs, Mary Lou Parker, John Pope, and Anthonette Touart-Rohlke. The USGS also acknowledges the NWFWMD staff for its cooperation in providing data and technical support-specifically, Angela Chelette, Tyler Macmillan, and Patricia Ryan who provided technical advice and support that was critical to the completion and accuracy of this project. Additionally, a special thanks is extended to the many utility operators, plant managers, golf course superintendents, and all of the other individuals who provided time and information vital to the completion of this effort.

Data Categories and Sources

Water-use data discussed in this report were compiled from several sources that include the NWFWMD permit data base (compliance reports), the FDEP, Drinking Water Program, MOR's, the USGS water-use data base, as well as responses to a questionnaire mailed during the project. Water users were divided into six major categories; these categories are uniform across the State and include public supply, domestic self-supplied (including small public supply systems), commercial-industrial self-supplied, power generation, agricultural irrigation, and recreational irrigation.

Public Supply

The public-supply category refers to water supplied by a publicly- or privately- owned water system for public distribution. According to the FDEP, any water system that serves more than 25 people or has 15 year-round service connections is considered to be a public supplier (Florida Department of Environmental Regulation, 1990). In 1995, 211 water systems met these criteria in the NWFWMD (Drinking Water Quick Look Report, Florida Department of Environmental Protection, April 1995, Kenna Study, written commun.).

Water-use data for 1995 were collected for those systems that used 0.05 Mgal/d or more. A list of these systems was obtained from the USGS 1995 State water-use data base. Information was primarily obtained from a public supply questionnaire prepared for the project. Some data were also obtained from the NWFWMD permit data base, the USGS 1995 state water-use data base, or from the FDEP drinking water files. Data included the annual average for 1995, peak

day, peak month, peak three months, service connections, and population served.

Estimates of the population served by individual public suppliers were obtained for all systems that used 0.05 Mgal/d in 1995. These estimates were obtained either from the public supplier through the questionnaire, or from the FDEP MOR's or Sanitary Surveys, or they were calculated by multiplying the total service connections (usually supplied by the public supplier) by the number of people per household by county, which is published by the University of Florida, Bureau of Economic and Business Research (BEBR) (Smith and Cody, 1996).

Domestic Self-Supplied and Small Public Supply Systems

Domestic self-supplied use includes water withdrawn by individual households (domestic wells) and small commercial users (churches, convenience stores, restaurants, and others) that are not served by a public water supplier. For the purpose of this project, this category also includes water withdrawn by the small public supply systems (with a daily average pumpage of less than 0.05 Mgal/d) not inventoried under public supply. No data were collected for this category; wateruse estimates were made based on information from the public supply category.

Estimates of domestic self-supplied population were derived by subtracting the population served by public-supplied systems from the total county population, published by BEBR (University of Florida, 1996). Domestic self-supplied withdrawals were calculated by multiplying the public supply per-capita use (in gallons per day) by the self-supplied population served for each county. The public supply per-capita use figures were derived by taking the public-supplied water use for each county and dividing it by the total county population served by public supply.

Commercial-Industrial Self-Supplied

Commercial-industrial self-supplied use includes water withdrawn at commercial, industrial, and mining facilities. Commercial self-supplied use includes water withdrawn at government and military facilities, schools, prisons, hospitals, recreational facilities, and nonmanufacturing establishments. Industrial self-supplied use includes water withdrawn at mining, processing, and manufacturing facilities.

Water-use data for 1995 were collected for the 14 largest self-supplied water users within the District that, combined, accounted for 95 percent of the District's total water use in the commercial-industrial self-supplied category. A list of these systems was obtained from the USGS 1995 State water-use data base. Information was primarily obtained from a commercial-industrial questionnaire prepared for the project. Some data were also obtained from the NWFWMD permit data base and the USGS 1995 State water-use data base. Data included annual average for 1995, peak day, peak month, and peak three months.

Power Generation

Power generation use includes water withdrawn (fresh and saline) at thermoelectric power generation facilities and water used at hydroelectric facilities. All water withdrawn for use at these facilities was considered, including water for domestic purposes, boiler make-up, cooling (including once through), landscape irrigation, and washdown or cleanup.

Water-use data for 1995 were collected for the five thermoelectric power plants and one private generating facility within the District. Information was obtained from a power generation questionnaire and from the NWFWMD permit data base and the USGS 1995 State water-use data base. Data included annual average water use for 1995, peak day, peak month, and peak three months. Information about the amount of water purchased from public supply was obtained from each facility, along with the total gross power generated. Water-use data for the two hydroelectric facilities within the NWFWMD are not included in this report because this is considered an instream use.

Recreational Irrigation

Recreational irrigation use includes the artificial application of water on lands to assist in the growing of turf grass and shrubbery and water used for aesthetic purposes. Turf grass irrigation includes golf courses, athletic fields, parks, playgrounds, nonresidential lawns, and cemeteries. For the purpose of this report, recreational irrigation includes only golf course irrigation. Water-use values for golf course irrigation were estimated based on irrigated acreage multiplied by a coefficient (usually in inches per acre) generated from selected irrigation models for turf grass. The supplemental irrigation coefficient used for this project was estimated from the Agricultural Field Scale Irrigation

Requirements Simulation (AFSIRS) computer model (Smajstrla, 1986).

A master list of golf courses was developed for this project from several sources. These included the NWFWMD water-use permit data base, The Florida Sports Foundation, Fairways in the Sunshine, Official Florida Golf Guide (Florida Sports Foundation, 1994), The Florida Atlas and Gazetteer (DeLorme Publishing Company, 1986), and The National Golf Foundation (National Golf Foundation, 1997). A questionnaire was developed and sent to 52 golf courses from the master list. Information was either obtained from the questionnaire or from the NWFWMD water-use permit data base. Data collected for 1995 included average water use per day, primary and secondary water sources, acres irrigated, and number of golf holes.

Agricultural (Self-Supplied) Irrigation

Agricultural irrigation use consists of water withdrawn for the irrigation of crops and nonirrigation uses associated with farming operations. Irrigation includes the artificial application of water on lands to assist in the growing of crops or to prevent damage to crops due to harsh climatic conditions. This includes water withdrawn for irrigating field, fruit and vegetable crops, ornamental plants, and grasses or pasture. Non-irrigation includes water withdrawn for livestock

(washing down dairy and farm equipment), fish farming (water for augmenting ponds), and other uses associated with farm operations. All water-use values (historical and projected) for this category were supplied by the University of Florida, IFAS (Moss and de Bodisco, 1998).

Description of Study Areas

The Florida Water Resource Act of 1972 established authority for management of the State's water resources through five Water Management Districts that encompass the entire State (Fernald and Patton, 1984) and currently operate under the general supervision of the Florida Department of Environmental Protection. The NWFWMD is one of the Districts and is located in the western panhandle of Florida (fig. 1), encompassing approximately 19 percent of the total land area of the State (Fernald and Patton, 1984). Located within the District are all or part of the following 16 Counties: Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson (part), Leon, Liberty, Okaloosa, Santa Rosa, Wakulla, Walton, and Washington (fig. 1). In 1995, the NWFWMD had an estimated population of 1.13 million residents (Marella, in press), or approximately 8 percent of the total population of Florida. The majority (70 percent) of the District's population in 1995 resided in Escambia,

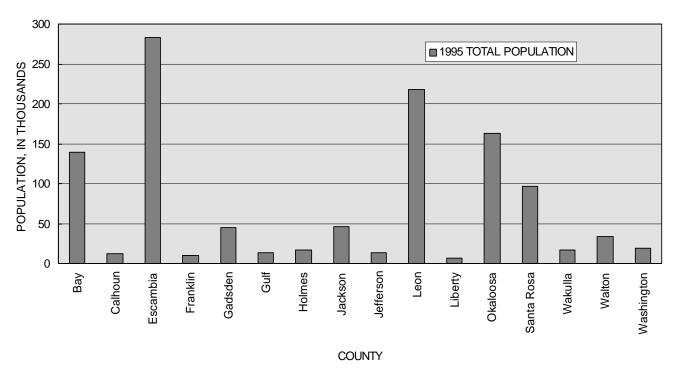


Figure 2. County population for the Northwest Florida Water Management District, 1995. (From University of Florida, 1996)

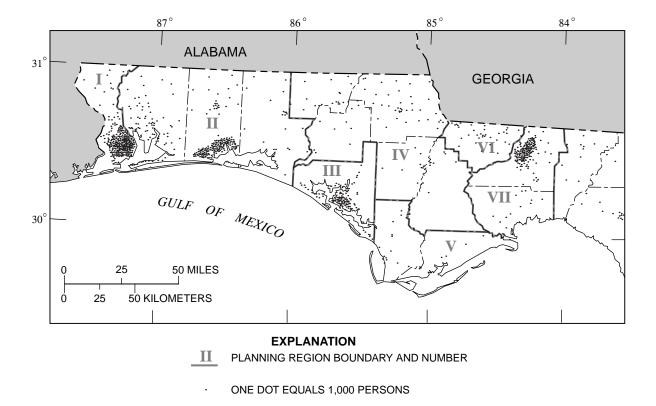


Figure 3. Population distribution for northwest Florida, 1990. (From Fernald and Purdum, 1992)

Leon, Okaloosa, and Bay Counties (fig. 2). Within these four counties, the population is centered around urban areas or along the coast (fig. 3). For the purpose of this report, the District has divided these 16 Counties into seven Planning Regions (PR) (fig. 1), which are described below.

Planning Region I

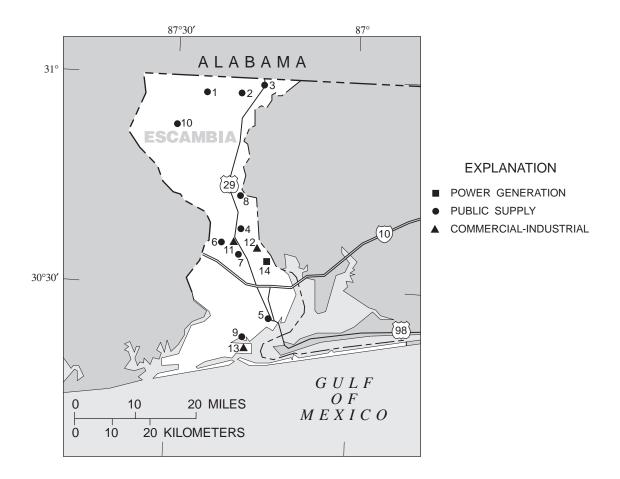
Planning Region I (PR I) is Escambia County (fig. 4). Pensacola is located within Escambia County, and is one of the District's largest cities and urban areas. In 1995, Escambia County's total population was estimated at 282,742 (University of Florida, 1996). The population of the county increased 38 percent between 1970 and 1995.

For this report, water withdrawn in PR I during 1995 was estimated at about 270.7 Mgal/d (table 1). Water withdrawn for power generation accounted for the largest amount of water used (60 percent), followed by commercial-industrial self-supplied (23 percent), public supply (14 percent), and the remaining 3 percent for domestic self-supplied and small public supply systems, recreational irrigation, and agricultural irrigation (table 1). Most of the water used for power generation

(99 percent) was surface water used for cooling purposes, and nearly all of this was returned to its source (Marella, in press). Ground water supplied all of the drinking water for public supply (36.9 Mgal/d), and for domestic self-supplied and small public supply systems (5.4 Mgal/d) during 1995.

Planning Region II

Planning Region II (PR II) includes Okaloosa, Santa Rosa, and Walton Counties (fig. 5). In 1995, the total population of PR II was estimated at 292,213 (University of Florida, 1996). The population of PR II increased 106 percent between 1970 and 1995. The District's largest concentration of coastal population is within PR II; the majority lives within 10 miles of the coast (fig. 3). Seasonal populations and daily visitors in these coastal areas increase substantially during the summer months. Located within PR II is Eglin Air Force Base, which houses a large permanent and temporary population. Within PR II is one of the five Areas of Special Concern (ASC 1), which includes the coastal areas of all three counties (fig. 5) and most of the population and urban centers.



Map			
number	Utility/Owner	Plant/facility	County
1	Bratt-Davisville Water System		Escambia
2	Central Water Works		Escambia
3	Century Utilities		Escambia
4	Cottage Hill Utilities		Escambia
5	Escambia County Utility Authority		Escambia
6	Farm Hill Utilities		Escambia
7	Gonzalez Utilities		Escambia
8	Molino Utilities		Escambia
9	Peoples Water System		Escambia
10	Walnut Hill Water Works		Escambia
11	Champion International Corp.		Escambia
12	Monsanto Corp.		Escambia
13	U.S. Navy: Pensacola NAS		Escambia
14	Gulf Power Company	Crist Plant	Escambia

Figure 4. General location of projected water users in Planning Region I.

Table 1. Total water use by Planning Region and county in the Northwest Florida Water Management District, 1995 [All values in million gallons per day; agricultural irrigation data from Moss and de Bodisco, 1998]

	Public supply	Domestic self- supplied and small public supply systems	Commercial- industrial self- supplied	Recreational irrigation (golf courses)	Agricultural irrigation	Power generation	1995 total water use
Planning Region I	36.94	5.37	62.33	1.81	0.14	164.10	270.69
Escambia	36.94	5.37	62.33	1.81	0.14	164.10	270.69
Planning Region II	38.04	3.27	11.77	5.43	1.49	0.00	60.00
Okaloosa	21.18	1.86	3.97	2.62	1.23	0.00	30.86
Santa Rosa	12.51	0.89	6.20	1.54	0.21	0.00	21.35
Walton	4.35	0.52	1.60	1.27	0.05	0.00	7.79
Planning Region III	24.32	2.23	27.69	1.90	0.00	259.25	315.39
Bay	24.32	2.23	27.69	1.90	0.00	259.25	315.39
Planning Region IV	5.28	12.00	1.90	0.69	11.28	50.70	81.85
Calhoun	0.68	1.15	0.00	0.00	2.09	0.00	3.92
Holmes	1.01	3.52	0.00	0.25	0.00	0.00	4.78
Jackson	2.19	4.68	1.55	0.25	8.30	50.31	67.28
Liberty	0.29	0.70	0.24	0.00	0.00	0.39	1.62
Washington	1.11	1.95	0.11	0.19	0.89	0.00	4.25
Planning Region V	3.02	0.37	28.70	0.18	0.00	0.00	32.27
Franklin	1.74	0.03	0.00	0.00	0.00	0.00	1.77
Gulf	1.28	0.34	28.70	0.18	0.00	0.00	30.50
Planning Region VI	3.79	2.20	1.02	0.25	5.24	0.00	12.50
Gadsden	3.79	2.20	1.02	0.25	5.24	0.00	12.50
Planning Region VII	29.41	6.82	1.09	1.24	5.25	71.77	115.58
Jefferson	0.70	1.28	0.23	0.19	4.24	0.00	6.64
Leon	27.66	4.61	0.23	0.95	1.01	2.64	37.10
Wakulla	1.05	0.93	0.63	0.10	0.00	69.13	71.84
Totals	140.80	32.26	134.50	11.50	23.40	545.82	888.28

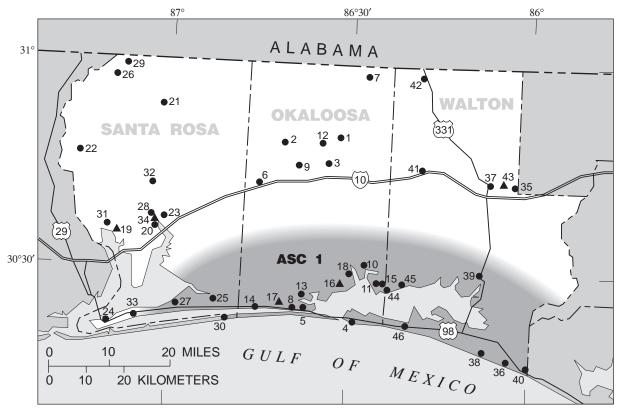
For this report, water withdrawn in PR II during 1995 was estimated at about 60.0 Mgal/d (table 1). The largest amount of water withdrawn in 1995 was for public supply (63 percent), followed by commercial-industrial self-supplied (20 percent), recreational irrigation (9 percent), domestic self-supplied and small public supply systems (5.5 percent), and agricultural irrigation (2.5 percent) (table 1). Ground water supplied all of the drinking water for public supply (38.0 Mgal/d), and for domestic self-supplied and small public supply systems (3.3 Mgal/d).

Planning Region III

Planning Region III (PR III) is Bay County (fig. 6). Within Bay County is the coastal urban areas associated with Panama City and Panama City Beach. In 1995, Bay County's total population was estimated at 139,173 (University of Florida, 1996). The popula-

tion of PR III increased 85 percent between 1970 and 1995. Within PR III is ASC 4, which encompasses the western coastal area of the county (fig. 6) and includes a large portion of the tourist and seasonal population centers within PR III (fig. 3).

For this report, water withdrawn in PR III during 1995 was estimated at 315.4 Mgal/d (table 1). The largest amount of water withdrawn was for power generation (82 percent), followed by commercial-industrial self-supplied (9 percent), public supply (8 percent), and the remaining 1 percent for domestic self-supplied and small public supply systems and recreational irrigation (table 1). Most of the water used for power generation (99.7 percent) was saline surface water used for cooling purposes, and all of this was returned to its source (Marella, in press). During 1995, surface water supplied 79 percent of the drinking water for public supply (19.2 Mgal/d); ground water supplied the remaining



EXPLANATION

AREA OF SPECIAL CONCERN (ASC)

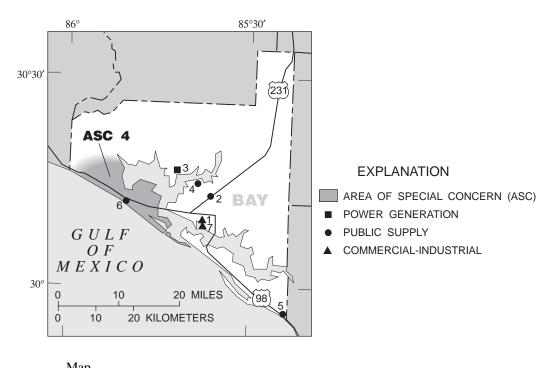
PUBLIC SUPPLY

COMMERCIAL-INDUSTRIAL

Map			
number	Utility/Owner	Plant/facility	County
1	Auburn Water System		Okaloosa
2	Baker Water System		Okaloosa
3	Crestview, City of		Okaloosa
4	Destin Water Users		Okaloosa
5	Fort Walton Beach, City of		Okaloosa
6	Holt Water System		Okaloosa
7	Laurel Hill, City of		Okaloosa
8	Mary Ester, City of		Okaloosa
9	Milligan Water System		Okaloosa
10	Niceville, town of		Okaloosa
11	Okaloosa County Water/Sewer	Bluewater Bay	Okaloosa
12	Okaloosa County Water/Sewer	Mid County-Del Cerro	Okaloosa
13	Okaloosa County Water/Sewer	Main (Garnier)	Okaloosa
14	Okaloosa County Water/Sewer	County West-Seashore	Okaloosa
15	Seminole Community Water System		Okaloosa
16	US Air Force: Eglin AFB	Main System	Okaloosa
17	US Air Force: Hulbert Field		Okaloosa
18	Valparaiso, City of		Okaloosa
19	Air Products and Chemicals, Inc.		Santa Rosa
20	Bagdad/Garron Water System		Santa Rosa
21	Berrydale Water System		Santa Rosa
22	Chumuckla, town of		Santa Rosa
23	East Milton Water System		Santa Rosa

Map			
number	Utility/Owner	Plant/facility	County
24	Gulf Breeze, City of		Santa Rosa
25	Holly/Navarre Water System		Santa Rosa
26	Jay, town of		Santa Rosa
27	Midway Water System		Santa Rosa
28	Milton, City of		Santa Rosa
29	Moore Creek/Mt. Carmel		Santa Rosa
30	Navarre Beach		Santa Rosa
31	Pace, City of		Santa Rosa
32	Point Baker Water System		Santa Rosa
33	South Santa Rosa Utilities		Santa Rosa
34	Sterling Fibers (Cytec), Inc.	Santa Rosa Plant	Santa Rosa
35	Argyle Water System		Walton
36	Camp Creek Water System		Walton
37	DeFuniak Springs, City of		Walton
38	Florida Community Service Company	Seagrove Beach	Walton
39	Freeport, town of		Walton
40	Inlet Beach Water System		Walton
41	Mossy Head Water System		Walton
42	Paxton, town of		Walton
43	Purdue Farms, Inc.		Walton
44	Smith Water Company	Villa Tasso	Walton
45	Smith Water Company	Choctaw Beach	Walton
46	South Walton Utilities		Walton

Figure 5. General location of projected water users in Planning Region II.



Map			
number	Utility/Owner	Plant/facility	County
1	Arizona Chemical Company	Bay County Plant	Bay
2	Bay County Public Utilities	Potable Water System	Bay
3	Gulf Power Company	Smith Plant	Bay
4	Lynn Haven, City of		Bay
5	Mexico Beach, City of		Bay
6	Panama City Beach		Bay
7	Stone Container Corporation		Bay

Figure 6. General location of projected water users in Planning Region III.

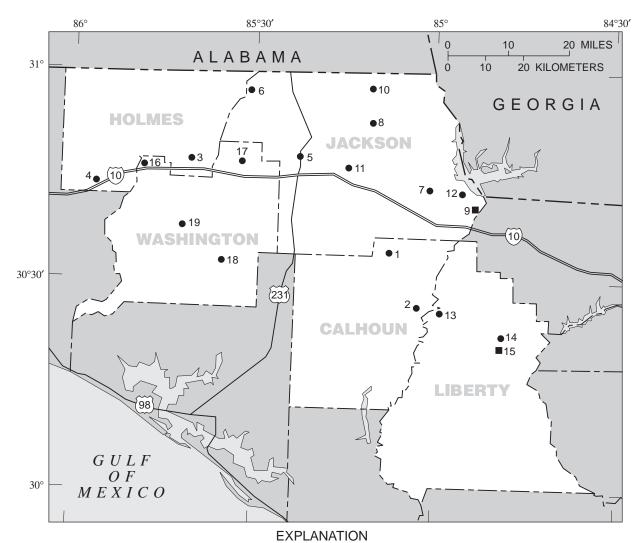
10 percent (5.1 Mgal/d) of the public supply water, and all of the domestic self-supplied and small public supply systems (2.2 Mgal/d). An additional 25.2 Mgal/d of surface water was withdrawn by public supply and delivered directly for commercial-industrial use. This water was accounted for under the commercial-industrial self-supplied category for projection purposes.

Planning Region IV

Planning Region IV (PR IV) includes Calhoun, Holmes, Jackson, Liberty, and Washington Counties (fig. 7). In 1995, the total population of PR IV was estimated at 101,833 (University of Florida, 1996). The population of PR IV increased 51 percent between 1970 and 1995. The majority of the population in PR IV live in rural areas throughout the five counties (fig. 3). The

District's largest concentration of agricultural lands is within Jackson County.

For this report, water withdrawn in PR IV for 1995 was estimated at 81.9 Mgal/d (table 1). The largest amount of water withdrawn was for power generation (62 percent), followed by domestic self-supplied and small public supply systems (15 percent), agricultural irrigation (14 percent), public supply (6.5 percent), and the remaining 2.5 percent for commercial-industrial selfsupplied and recreational irrigation (table 1). Ground water supplied all of the drinking water for public supply (5.3 Mgal/d) and domestic self-supplied and small public supply systems (12.0 Mgal/d). Nearly all of the water used for power generation (99.2 percent) was surface water used for cooling purposes, and nearly all of this was returned to its source (Marella, in press). Most of the water withdrawn for agricultural irrigation was ground water.



- POWER GENERATION
- PUBLIC SUPPLY

Мар			
n u m ber	U tility/O w n er	Plant/facility	County
1	Altha, town of		Calhoun
2	Blountstown, City of		Calhoun
3	Bonifay, City of		Holmes
4	Ponce DeLeon, town of		Holmes
5	Cottondale, town of		Jackson
6	Graceville, City of		Jackson
7	Grandridge, City of		Jackson
8	Greenwood, town of		Jackson
9	Gulf Power Company	Scholz Plant	Jackson
10	Malone, town of		Jackson
11	Marianna, City of		Jackson
12	Sneads, town of		Jackson
13	Bristol, City of		Liberty
14	Hosford-Telogia Water System		Liberty
15	Timber Energy Inc.		Liberty
16	Carryville, town of	_	Washington
17	Chipley, City of		Washington
18	Southern States Utilities	Sunny Hills/Deltona	Washington
19	Vernon Water System		Washington

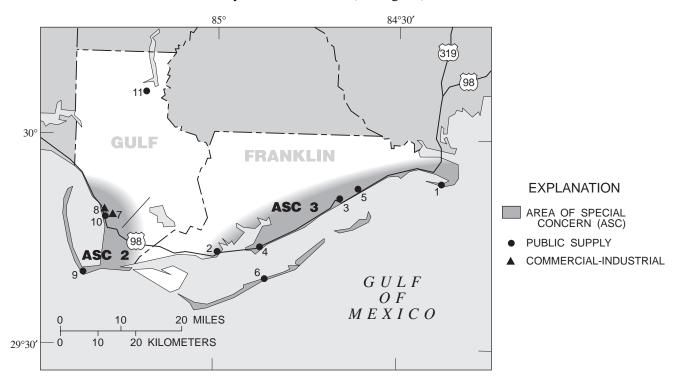
Figure 7. General location of projected water users in Planning Region IV.

Planning Region V

Planning Region V (PR V) includes Franklin and Gulf Counties (fig. 8). Most of this Planning Region is forest or wetlands with several small coastal communities. In 1995, the total population of PR V was estimated at 23,507 (University of Florida, 1996). The population of PR V increased 37 percent between 1970 and 1995. The majority of the population live in or near the coastal communities (fig. 3), where seasonal populations increase substantially during the summer months. Within PR V are two ASC's - ASC 2 covers the coastal area of western Gulf County, whereas

ASC 3 covers the coastal area of Franklin County, including the barrier islands of the county (fig. 8).

For this study, water withdrawn during PR V for 1995 was estimated at 32.3 Mgal/d (table 1). The largest amount of water withdrawn was for commercial-industrial self-supplied (89 percent), followed by public supply (9 percent), while the remaining 2 percent was withdrawn by domestic self-supplied and small public supply systems, and recreational irrigation (table 1). Ground water supplied all of the drinking water for public supply (3.0 Mgal/d), and for domestic self-supplied and small public supply systems (0.4 Mgal/d).



Map			
number	Utility/Owner	Plant/facility	County
1	Alligator Point Water System		Franklin
2	Apalachicola, City of		Franklin
3	Carrabelle, town of		Franklin
4	East Point Water System		Franklin
5	Lanark Village		Franklin
6	St. George Island Utilities		Franklin
7	Arizona Chemical Company	Gulf County Plant	Gulf
8	Florida Coast Paper Company		Gulf
9	Lighthouse Utilities	Cape San Blas	Gulf
10	Port St. Joe, City of		Gulf
11	Wewahitchka, town of		Gulf

Figure 8. General location of projected water users in Planning Region V.

Planning Region VI

Planning Region VI (PR VI) is Gadsden County (fig. 9). In 1995, Gadsden County's total population was estimated at 44,734 (University of Florida, 1996). The population of PR VI increased 14 percent between 1970 and 1995. Within PR VI is ASC 5, which encompasses the central part of Gadsden County (fig. 9).

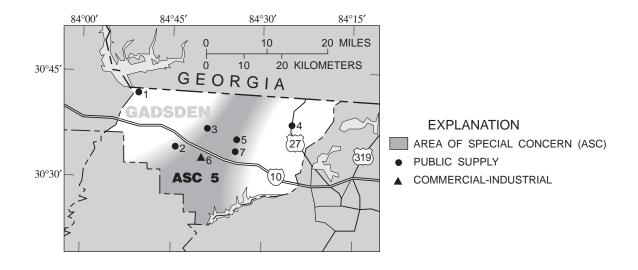
For this study, water withdrawn in PR VI during 1995 was estimated at 12.5 Mgal/d (table 1). The largest amount of water withdrawn was for agricultural irrigation (42 percent), followed by public supply (30 percent), domestic self-supplied and small public supply systems (18 percent), commercial-industrial self-supplied (8 percent), and recreational irrigation (2 percent) (table 1). Ground water supplied 64 percent of the drinking water for public supply (2.4 Mgal/d) and all of the domestic self-supplied and small public supply systems (2.2 Mgal/d), whereas surface water supplied 34 percent (1.4 Mgal/d) of the public supply water.

Mon

Planning Region VII

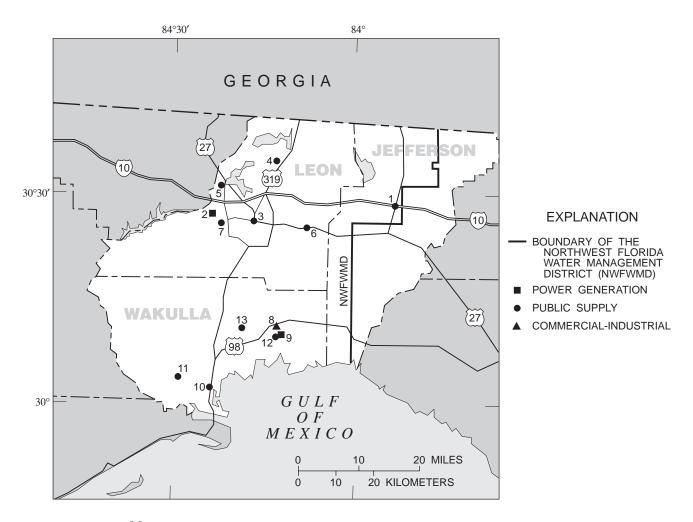
Planning Region VII (PR VII) includes Jefferson, Leon, and Wakulla Counties (fig. 10). In 1995, the total population of PR VII was estimated at 248,047 (University of Florida, 1996). The population of PR VII increased 110 percent between 1970 and 1995. Tallahassee is located within Leon County, and is one of the District's largest cities and urban areas. The majority of the population in this Planning Region live in the urban area associated with Tallahassee (fig. 3). Data for this PR VII include all of Jefferson County, even though the eastern part of the county is not located within the NWFWMD (fig. 10).

For this study, water withdrawn in PR VII during 1995 was estimated at 115.6 Mgal/d (table 1). The largest amount of water withdrawn was for power generation (62 percent), followed by public supply (25 percent), agricultural irrigation (5 percent), domestic self-supplied and small public supply systems (6 percent), and the remaining 2 percent for recreational irrigation and commercial-



Map			
number	Utility/Owner	Plant/facility	County
1	Chattahochee, City of		Gadsden
2	Greensboro, town of		Gadsden
3	Gretna, town of		Gadsden
4	Havana, town of		Gadsden
5	Quincy, City of		Gadsden
6	Quincy Farms, Inc.		Gadsden
7	Talquin Electric Cooperative	Gadsden Regional	Gadsden

Figure 9. General location of projected water users in Planning Region VI.



Map					
number	Utility/Owner	Plant/facility	County		
1	Monticello, City of		Jefferson		
2	Tallahassee, City of	Hopkins Power Plant	Leon		
3	Tallahassee, City of	Main System	Leon		
4	Talquin Electric Cooperative	Bradfordville Regional	Leon		
5	Talquin Electric Cooperative	Lake Jackson Regional	Leon		
6	Talquin Electric Cooperative	East Regional	Leon		
7	Talquin Electric Cooperative	South Regional	Leon		
8	Primex Technologies, Inc.		Wakulla		
9	Tallahassee, City of	Purdom Plant	Wakulla		
10	Panacea Water System		Wakulla		
11	Sopchoppy, town of		Wakulla		
12	St. Marks, town of		Wakulla		
13	Talquin Electric Cooperative	Gulf Coast	Wakulla		

Figure 10. General location of projected water users in Planning Region VII.

industrial self-supplied (table 1). Nearly all of the water used for power generation (96 percent) was surface water used for cooling purposes, and nearly all of this was returned to its source (Marella, in press).

Ground water supplied all of the drinking water for public supply (29.4 Mgal/d), and for domestic self-supplied and small public supply systems (6.8 Mgal/d).

1995 Base Data

Total water withdrawn (fresh and saline) in 1995 within the NWFWMD was estimated at 888.3 Mgal/d (table 1) for this study. This estimate differs somewhat from the 925.1 Mgal/d value published in Marella (in press). The difference is a result of 1) higher water use thresholds used to inventory users for this study, 2) different agricultural irrigation estimates, and 3) the inclusion of data for all of Jefferson County (including the area outside the District) in this report. According to Marella (in press) about 71 percent of the water withdrawn in the NWFWMD in 1995 was freshwater, while the remaining 29 percent was saline water. Of the freshwater withdrawn, 60 percent was surface water and the remaining 40 percent was ground water. The largest amount of fresh surface water was withdrawn from the Escambia River (41 percent), followed by the St. Marks River (18 percent), the Apalachicola River (13 percent), and Deer Point Lake (11 percent). All of the surface water withdrawn from the Apalachicola, Escambia, and St. Marks Rivers is used for once-through cooling for power generation and is returned to its source. The Floridan aquifer system supplied nearly 60 percent of the ground water withdrawn, and the sand-and-gravel aquifer supplied the remaining 40 percent.

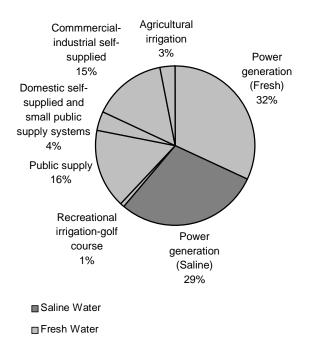


Figure 11. Total water withdrawn in the Northwest Florida Water Management District by category, 1995.

Of the 888.3 Mgal/d of water use accounted for in this report, power generation accounted for the largest amount of water withdrawn (545.8 Mgal/d), followed by public supply (140.8 Mgal/d), commercial-industrial self-supplied (134.5 Mgal/d), domestic self-supplied and small public supply systems (32.3 Mgal/d), agricultural irrigation (23.4 Mgal/d), and recreational irrigation (11.5 Mgal/d) (table 1 and fig. 11). Ground water supplied all of the water used for domestic self-supplied and small public supply systems, 85 percent of the water used for public supply, and 80 percent of the water used for agricultural irrigation. Surface water supplied more than 99 percent of the water used for power generation and 60 percent of the water used for commercial-industrial self-supplied. Water used for recreational irrigation was supplied by ground, surface, and reclaimed water.

Planning Region III (Bay County) accounted for the largest amount of water withdrawn in the NWFWMD in 1995. Water withdrawn in PR III was estimated at 315.4 Mgal/d (table 1 and fig. 12). About 83 percent of the water withdrawn in PR III was saline. Planning Region I (Escambia County) was the next largest user of water (270.7 Mgal/d), followed by PR VII (Jefferson, Leon, and Wakulla Counties) (115.6 Mgal/d). These three Planning Regions (III, I, and VII) accounted for 79 percent of the District's total water use.

PROJECTION METHODOLOGY

Several methods were used to project water use for each of the five water use categories: public supply, domestic self-supplied and small public supply systems, commercial-industrial self-supplied, power generation, and recreational irrigation (golf courses). Methods varied from category to category, and were chosen based on the level of detail needed and the availability of historical and current data. For some categories, water-use projections were made by the water users. No projections were made for small water use categories such as livestock, fish farming, and residential lawn watering. The methodology and variables used for each category are detailed below.

For this project, curve fitting and extrapolation were used to project most of the variables (population, population served by public supply, and water use). This mathematical method is based on the fitting of a curve to historical population or water-use data and then extending this curve to arrive at future values. Six

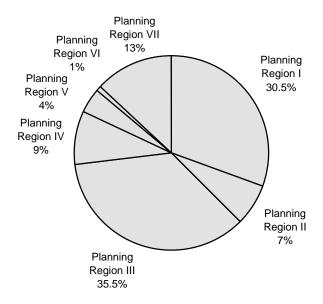


Figure 12. Total water withdrawn in the Northwest Florida Water Management District by Planning Region, 1995.

of the most widely used curves of this type are: linear, geometric, parabolic, modified exponential, Gompertz, and logistic (Klosterman, 1990). These curves all rely on the assumption that the particular variable (population or water use) is related to time in some manner. Linear, geometric, and parabolic curves are based on assumptions about the growth or growth rate of the variable. The linear curve assumes a constant increase in the variable, the geometric curve assumes a constant growth rate over time, and the parabolic curve assumes a constant change in the growth rate over time. Modified exponential, Gompertz, and logistic curves are asymptotic, in that they all change in relation to a fixed value that they either do not exceed or do not fall below, yet the curve gets ever closer to the fixed value. The assumption inherent in these asymptotic curves is that there is a resource limit which confines the variable's growth above a particular number or that there is a lower limit to the variable. All six curves were generated for each population (county and utility) and wateruse projection.

Several techniques were used to determine which of the six curves best fit the historical trend. These techniques include: 1) visual examination, 2) evaluative statistics, and 3) other data or known limitations. The first step was to visually examine the graphs produced. Generally, only a few of the curves looked reasonable and fit the past trends well, and those curves that produce extreme or unrealistic results were

eliminated (fig. 13). The next step was to analyze the evaluative statistics of the remaining curves. The evaluative statistics include the Coefficient of Relative Variation (CRV), Mean Standard Error (MSE), Standard Error of the Estimate (SEE) and the Mean Absolute Percentage Error (MAPE) which are calculated for each curve (table 2). Input criteria measure how closely the assumptions made in the curve's changes correspond to changes in the actual historical data. For this study, the CRV was chosen as the input statistic. This coefficient is the standard deviation of the input evaluation values divided by the mean of these values (Klosterman, 1990). In this manner, the CRV is standardized without regard to units so that varying data can be compared. While input criteria measure discrepancies between the changes in the predicted values, output criteria measure discrepancies between the actual values and the predicted values. Output statistics include the MSE, SEE, and MAPE. The MSE and SEE are measures of how well the predicted values correlate to the actual values. The MAPE is devoid of units and allows comparison between varying data (Klosterman, 1990). Generally, the curves with the best CRV or MAPE values were chosen (table 2). The third step was used if the first or second steps did not produce a clear choice. This step involved comparing the data from the curves to information provided by the water user, published information, or other sources to compare and select an appropriate curve. In some cases, none of the curves produced statistically significant results, and in these instances, projections were made using information from the water user or other sources.

County Population Projections

The accuracy of using a curve fitting and extrapolation method are dependent upon the availability of reliable historical data. For this report, it was necessary to use population data in 5-year increments beginning with 1970. Generally, the U.S. Bureau of the Census (USBC) has the most reliable and comprehensive source of data available; it was the primary source for these population projections, but it is only available every 10 years.

The mid-decade population numbers are derived from BEBR. For all mid-decade population figures collected, the most recent data available are used. With the exception of 1995, only mid-census estimates that were calculated after the 1975 and 1985 censuses are

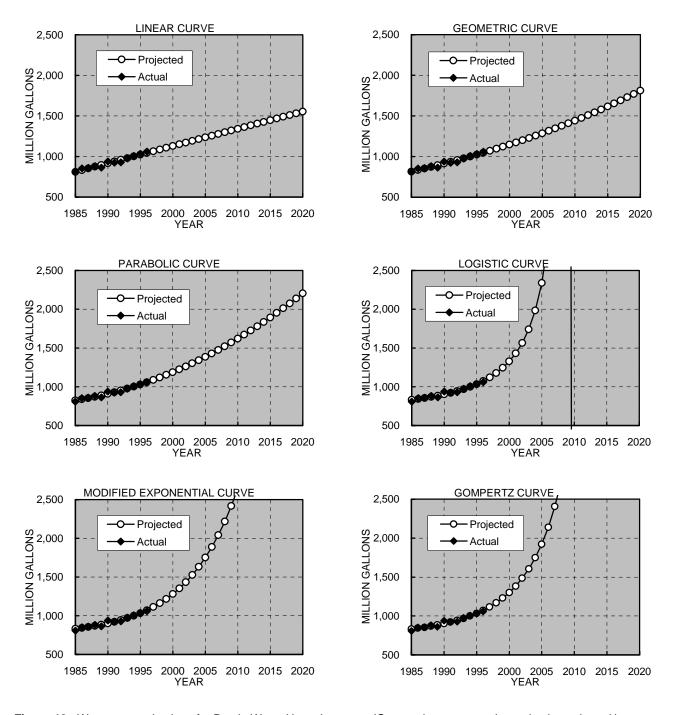


Figure 13. Water use projections for Destin Water Users by curve. (Geometric curve was the projection selected.)

used. Thus, the 1975 and 1985 population data are from the 1981 and 1991 Florida Statistical Abstract (University of Florida, 1981 and 1991). Although these estimates are rounded to the nearest hundred, they represent substantial differences from the estimates made within several years of the mid-census year. It is better to have numbers that differ slightly from the actual population due to rounding, rather than numbers

that are specific, yet represent estimates made from less complete data. The 1995 county population figures were derived from BEBR (University of Florida, 1996 and 1997).

The future population for each county was estimated by fitting a curve to the historical data from the USBC and BEBR, and extrapolating these data into the future in 5-year increments. The six curves mentioned

Table 2. Water use projections for Destin Water Users, Inc.

[All values in million gallons; Mod Exp, Modified Exponential; Geometric curve (grey column) was the projection selected; () values are negative]

Computed Values

Year Actual Linear Geometric Parabolic Mod Exp Gompertz Logistic 1986 852.20 831.64 833.95 837.96 843.26 842.93 842.58 1987 856.60 852.85 853.19 853.11 855.24 855.05 854.85 1988 881.20 874.07 872.88 869.77 868.83 868.72 868.61 1990 937.50 916.51 913.62 907.65 901.82 901.67 901.51 1991 923.20 937.73 934.69 928.87 921.77 921.53 921.27 1993 974.90 980.17 978.32 975.86 970.20 969.84 969.45 1994 1,007.10 1,001.38 1,000.89 1,001.64 999.48 999.26 999.03 1995 1,031.60 1,022.60 1,023.98 1,032.76 1,033.01 1,032.99 1996 1,059.43 1,043.82 1,047.61 1,057.74 1,070.58<	V	Computed Values							
1986 852.20 831.64 833.95 837.96 843.28 842.93 842.58 1987 858.60 852.85 853.19 853.11 855.24 855.05 854.85 1988 861.20 895.29 893.01 887.95 884.27 884.18 884.07 1990 937.50 916.51 913.62 907.65 901.82 901.67 901.51 1991 923.20 937.73 93.69 928.87 921.77 921.53 921.27 1992 928.40 986.95 956.26 997.86 970.20 969.84 969.45 1994 1,007.10 1,001.38 1,000.99 1,001.64 999.48 999.26 999.03 1995 1,031.60 1,022.60 1,023.98 1,028.93 1,032.76 1,033.01 1,033.29 1996 1,059.43 1,043.82 1,047.61 1,057.74 1,070.58 1,071.85 1,073.31 1997 - 1,065.04 1,071.77 1,088.07						•	•		
1987 858.60 852.85 853.19 853.11 855.24 855.05 854.85 1988 881.20 874.07 872.88 869.77 868.8.3 868.72 868.61 1989 863.20 895.29 893.01 887.95 884.27 884.18 884.07 1990 937.50 916.51 973.62 907.65 901.82 901.67 901.51 1991 923.20 937.73 934.69 928.87 921.77 921.53 921.27 1992 928.40 958.95 956.26 951.61 944.44 944.10 943.74 1993 974.90 980.17 978.32 975.86 970.20 969.84 969.45 1994 1,007.10 1,001.38 1,000.89 1,001.64 999.48 999.26 999.03 1995 1,031.60 1,022.60 1,023.98 1,028.93 1,032.76 1,033.01 1,033.29 1996 1,059.43 1,043.82 1,047.61 1,057.74 1,070.58 1,071.85 1,073.31 1997 1,065.04 1,071.77 1,088.07 1,113.56 1,116.74 1,120.46 1998 1,086.26 1,096.50 1,119.92 1,162.41 1,168.83 1,176.65 1999 1,107.48 1,121.80 1,153.29 1,217.92 1,229.57 1,244.49 2000 1,128.70 1,147.68 1,188.17 1,281.01 1,300.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,234.79 1,288.96 1,301.94 1,526.82 1,603.76 1,741.57 2004 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,333.55 2009 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,446.98 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2011 1,488.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.71) 2018 1,455.07 1,811.06 2,204.80 7,543.55 76,806.40 (50.93.71) 2019 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (50.25.9) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 1.54									
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1993 974.90 980.17 978.32 975.86 970.20 969.84 969.45 1994 1,007.10 1,001.38 1,000.89 1,001.64 999.48 999.26 999.03 1995 1,031.60 1,022.60 1,023.98 1,028.93 1,032.76 1,033.01 1997	1991	923.20	937.73	934.69	928.87	921.77	921.53	921.27	
1994 1,007.10 1,001.38 1,000.89 1,001.64 999.48 999.26 999.03 1995 1,031.60 1,022.60 1,023.98 1,028.93 1,032.76 1,033.01 1,033.29 1996 1,059.43 1,043.82 1,047.61 1,057.74 1,070.58 1,071.85 1,073.31 1997 1,065.04 1,071.77 1,088.07 1,113.56 1,116.74 1,120.46 1998 1,106.26 1,096.50 1,119.92 1,162.41 1,168.83 1,176.65 1999 1,107.48 1,121.80 1,153.29 1,217.92 1,229.57 1,244.49 2000 1,128.70 1,147.68 1,188.17 1,281.01 1,300.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,343.21 1,484.49 1,564.97 2003 1,128.75 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,383.32 1,508.99 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 RSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.54 1.47 1.32 1.37 1.39 1.40	1992	928.40	958.95	956.26	951.61	944.44	944.10	943.74	
1995 1,031.60 1,022.60 1,023.98 1,028.93 1,032.76 1,033.01 1,033.29 1996 1,059.43 1,043.82 1,047.61 1,057.74 1,070.58 1,071.85 1,073.31 1997	1993	974.90	980.17	978.32	975.86	970.20	969.84	969.45	
1996 1,059.43 1,043.82 1,047.61 1,057.74 1,070.58 1,071.85 1,073.31 1997	1994	1,007.10	1,001.38	1,000.89	1,001.64	999.48	999.26	999.03	
1997 1,065.04 1,071.77 1,088.07 1,113.56 1,116.74 1,120.46 1998 1,086.26 1,096.50 1,119.92 1,162.41 1,168.83 1,176.65 1999 1,107.48 1,121.80 1,153.29 1,217.92 1,229.57 1,244.49 2000 1,149.91 1,147.68 1,188.17 1,281.01 1,300.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,234.79 1,286.32 1,474.90 2,042.13 2,405.10 3,929.74 2007 1,277.23 1,	1995	1,031.60	1,022.60	1,023.98	1,028.93	1,032.76	1,033.01	1,033.29	
1998 1,086.26 1,096.50 1,119.92 1,162.41 1,168.83 1,176.65 1999 1,107.48 1,121.80 1,153.29 1,217.92 1,229.57 1,244.49 2000 1,128.70 1,147.68 1,188.17 1,281.01 1,300.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,213.57 1,257.31 1,342.91 1,632.07 1,747.57 1,983.84 2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2014 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,488.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 3.30 WSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40	1996	1,059.43	1,043.82	1,047.61	1,057.74	1,070.58	1,071.85	1,073.31	
1999 1,107.48 1,121.80 1,153.29 1,217.92 1,229.57 1,244.49 2000 1,128.70 1,147.68 1,188.17 1,281.01 1,300.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,213.57 1,257.31 1,342.91 1,632.07 1,747.57 1,983.84 2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40	1997		1,065.04	1,071.77	1,088.07	1,113.56	1,116.74	1,120.46	
2000 1,128.70 1,147.68 1,188.17 1,281.01 1,300.78 1,327.68 2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 <td< td=""><td>1998</td><td></td><td>1,086.26</td><td>1,096.50</td><td>1,119.92</td><td>1,162.41</td><td>1,168.83</td><td>1,176.65</td></td<>	1998		1,086.26	1,096.50	1,119.92	1,162.41	1,168.83	1,176.65	
2001 1,149.91 1,174.16 1,224.58 1,352.72 1,384.78 1,431.70 2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,213.57 1,257.31 1,342.91 1,632.07 1,747.57 1,983.84 2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,932.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 <td< td=""><td>1999</td><td></td><td>1,107.48</td><td>1,121.80</td><td>1,153.29</td><td>1,217.92</td><td>1,229.57</td><td>1,244.49</td></td<>	1999		1,107.48	1,121.80	1,153.29	1,217.92	1,229.57	1,244.49	
2002 1,171.13 1,201.24 1,262.50 1,434.21 1,484.49 1,564.97 2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,213.57 1,257.31 1,342.91 1,632.07 1,747.57 1,983.84 2005 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,340.88 1,441.70 1,620.56 2,644.05 3,778.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54	2000		1,128.70	1,147.68	1,188.17	1,281.01	1,300.78	1,327.68	
2003 1,192.35 1,228.96 1,301.94 1,526.82 1,603.76 1,741.13 2004 1,213.57 1,257.31 1,342.91 1,632.07 1,747.57 1,983.84 2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,425.76 <	2001		1,149.91	1,174.16	1,224.58	1,352.72	1,384.78	1,431.70	
2004 1,213.57 1,257.31 1,342.91 1,632.07 1,747.57 1,983.84 2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12)	2002		1,171.13	1,201.24	1,262.50	1,434.21	1,484.49	1,564.97	
2005 1,234.79 1,286.32 1,385.38 1,751.69 1,922.57 2,338.09 2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76	2003		1,192.35	1,228.96	1,301.94	1,526.82	1,603.76	1,741.13	
2006 1,256.01 1,315.99 1,429.38 1,887.63 2,137.69 2,901.14 2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,466.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13)	2004		1,213.57	1,257.31	1,342.91	1,632.07	1,747.57	1,983.84	
2007 1,277.23 1,346.35 1,474.90 2,042.13 2,405.10 3,929.74 2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,468.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19	2005		1,234.79	1,286.32	1,385.38	1,751.69	1,922.57	2,338.09	
2008 1,298.45 1,377.42 1,521.93 2,217.71 2,741.70 6,393.55 2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) <tr< td=""><td>2006</td><td></td><td>1,256.01</td><td>1,315.99</td><td>1,429.38</td><td>1,887.63</td><td>2,137.69</td><td>2,901.14</td></tr<>	2006		1,256.01	1,315.99	1,429.38	1,887.63	2,137.69	2,901.14	
2009 1,319.66 1,409.19 1,570.49 2,417.26 3,171.32 20,070.38 2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) <t< td=""><td>2007</td><td></td><td>1,277.23</td><td>1,346.35</td><td>1,474.90</td><td>2,042.13</td><td>2,405.10</td><td>3,929.74</td></t<>	2007		1,277.23	1,346.35	1,474.90	2,042.13	2,405.10	3,929.74	
2010 1,340.88 1,441.70 1,620.56 2,644.05 3,728.17 (15,146.93) 2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) </td <td>2008</td> <td></td> <td>1,298.45</td> <td>1,377.42</td> <td>1,521.93</td> <td>2,217.71</td> <td>2,741.70</td> <td>6,393.55</td>	2008		1,298.45	1,377.42	1,521.93	2,217.71	2,741.70	6,393.55	
2011 1,362.10 1,474.96 1,672.15 2,901.79 4,462.45 (5,210.20) 2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) <td>2009</td> <td></td> <td>1,319.66</td> <td>1,409.19</td> <td>1,570.49</td> <td>2,417.26</td> <td>3,171.32</td> <td>20,070.38</td>	2009		1,319.66	1,409.19	1,570.49	2,417.26	3,171.32	20,070.38	
2012 1,383.32 1,508.99 1,725.26 3,194.70 5,449.31 (3,041.52) 2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40	2010		1,340.88	1,441.70	1,620.56	2,644.05	3,728.17	(15,146.93)	
2013 1,404.54 1,543.81 1,779.89 3,527.60 6,804.06 (2,094.12) 2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 <t< td=""><td>2011</td><td></td><td>1,362.10</td><td>1,474.96</td><td>1,672.15</td><td>2,901.79</td><td>4,462.45</td><td>(5,210.20)</td></t<>	2011		1,362.10	1,474.96	1,672.15	2,901.79	4,462.45	(5,210.20)	
2014 1,425.76 1,579.42 1,836.03 3,905.93 8,708.21 (1,564.46) 2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 <	2012		1,383.32	1,508.99	1,725.26	3,194.70	5,449.31	(3,041.52)	
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2015 1,446.98 1,615.86 1,893.70 4,335.90 11,455.61 (1,227.12) 2016 1,468.19 1,653.14 1,952.88 4,824.56 15,536.87 (994.13) 2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40	2014		1,425.76	1,579.42	1,836.03	3,905.93	8,708.21	(1,564.46)	
2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40	2015		1,446.98	1,615.86		4,335.90	11,455.61	(1,227.12)	
2017 1,489.41 1,691.28 2,013.59 5,379.91 21,799.23 (824.07) 2018 1,510.63 1,730.30 2,075.81 6,011.06 31,760.73 (694.88) 2019 1,531.85 1,770.22 2,139.55 6,728.36 48,254.09 (593.71) 2020 1,553.07 1,811.06 2,204.80 7,543.55 76,806.40 (512.59) Evaluative Statistics CRV 1.14 1.17 28.85 3.30 3.30 3.30 MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40	2016		1,468.19		1,952.88	4,824.56	15,536.87	,	
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MSE 351.17 309.68 274.22 303.40 304.97 307.71 SEE 18.74 17.60 16.56 17.42 17.46 17.54 MAPE 1.54 1.47 1.32 1.37 1.39 1.40			1.14	1.17	28.85	3.30	3.30	3.30	
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MAPE 1.54 1.47 1.32 1.37 1.39 1.40									
MOTIVI 120 141 123	ASYM					756	741	723	

above were all fit to the historical data. The appropriate curve was initially selected based on statistical analysis and past trends, and the resulting projection was compared against those either published by BEBR, in the county comprehensive plans, or from other sources. After further scrutiny, the projection was either accepted, or rejected. If rejected, the process would begin again, this time excluding the first curve used. Estimates of the population within the ASC portion of the county were made by comparing the public supply population served within the ASC to the total population served within the county.

Public Supply Population Served Projections

Population served projections were made using historical population served data in 5-year increments. Either five (1975, 1980, 1985, 1990, and 1995) or six (1970, 1975, 1980, 1985, 1990, and 1995) data points were used, depending on available data. For utilities that did not supply water before 1975, all available data points were used to estimate the future population served. Data came primarily from the USGS water-use data base (5-year assessments), but were also derived from service connections multiplied by people per household, and from FDEP Sanitary Surveys, BEBR, the NWFWMD water-use permit data base, and other sources. If the historical population served data were missing for one of the five or six data points (years), missing values were estimated based on the mean of the surrounding years.

From these data, each utility's population served was projected for the years 2000, 2005, 2010, 2015 and 2020 by selecting the most statistically viable projection curve. The population served for these years was then divided into the projected water use to calculate a utility per capita value. If the per capita value appeared to be appropriate for a particular utility based on historical data and trends, then the water-use projection was considered acceptable. If not, the utility's projected water-use calculations and historical population estimates were re-examined and adjustments were made as to the projection chosen.

Public Supply Water Use Projections

Projections for public supply water use were made using historical water-use values for a 6-year (1991-96), 9-year (1988-96), or 12-year (1985-96) period between

1985 and 1996. The period selected was based on the reliability of the data and the pattern of water use for the utility. Water-use projections were made by fitting a curve to the historical data and extrapolating. The appropriate curve was selected by statistical analysis and past trends, and was compared against projections provided by the utility (if the utility did supply projections).

Projections were calculated for all utilities that used more than 0.10 Mgal/d in 1995 or that were projected to reach 0.10 Mgal/d by 2020. Projections were made with the assumption that the future trend for each utility is the same as the past trend (unless build out or expansion is noted through contact with the utility). Water-use projections for each utility were then checked against the projected population served as described above, and a per capita value was generated per utility. The per capita value was used to help verify the population served and the water use projection by utility. If the estimated per capita value was less than 100 gal/d or more than 200 gal/d, then the projection variables were reexamined, and recalculated if needed.

Peak day, peak month, and peak three-month values were projected using a calculated ratio between the annual daily average water use and the actual peak value per utility for each (peak day, peak month, and peak three-month), and multiplying it by the projected annual daily average. The peak day, peak month, and peak three-month values were obtained from the historical records of the utilities contacted through the public supply questionnaire or from the FDEP MOR files, and for the smaller utilities where data were not available, the county average was applied.

The ratio used for each peak day, peak month, and peak three-month period was the highest ratio of the particular peak to that year's annual daily average since 1985. Using the peak month and the peak three-month values helped accommodate for seasonality of public supply water use. Water demand increases from May through September because of lawn watering, seasonal population, and daily visitors. It is not possible to differentiate the demand for each use (lawn watering, seasonal population, or daily visitors) out of the total. The assumption was made that the ratio between the annual average daily use and peak day, peak month, and peak three-month values will remain about the same between 1995 and 2020, and that all peak events will occur at approximately the same time of year. To verify these peak values, the trend in ratios was examined and anomalies were omitted using information obtained from the utilities.

Domestic Self-Supplied and Small Public Supply Systems Water-Use Projections

Projections for domestic self-supplied and small public supply systems populations were made by subtracting the population served by public supply from the total county population. This assumes the remaining population to be self-supplied or served by small public supply systems that use less than 0.10 Mgal/d (systems not accounted for under public supply). For estimating the domestic self-supplied and small public supply systems populations in each ASC, the same percentage of population for the ASC portion of the county was used, and it was assumed that this percentage would not change through 2020.

The water use for domestic self-supplied and small public supply systems was then calculated by assuming that the population not on public supply used the same amount of water (per capita) as the portion of the population on public supply in a county. The per capita value was then multiplied by the domestic self-supplied and small public supply systems population to estimate the water demand for this category on a county level. The per capita value was calculated by taking the projected public supply water use per year and dividing it by the projected public supply population served per year for each county.

Commercial-Industrial Self-Supplied Water-Use Projections

Projections for the 14 major self-supplied commercial-industrial facilities were provided directly by the users. Peak day, peak month, and peak three-month values were projected using a calculated ratio between the actual peak value per facility for each period and then multiplying that value by the projected annual daily average. The 14 commercial-industrial self-supplied systems inventoried and projected individually include: Arizona Chemical Company (Bay County), Stone Container Corporation (Bay County), Champion International Corporation (Escambia County), Monsanto Corporation (Escambia County), U.S. Navy; Pensacola Naval Air Station (Escambia County), Ouincy Farms (Gadsden County), Arizona Chemical Company (Gulf County), Florida Coast Paper Company (Gulf County), U.S. Air Force; Eglin Air Force Base (Okaloosa County), U.S. Air Force; Hulbert Field (Okaloosa County), Sterling Fibers Incorporated (Santa Rosa County), Air Products and Chemicals Incorporated (Santa Rosa County), Purdue Farms

Incorporated (Walton County), and Primex Technologies Incorporated (Wakulla County). Water-use values for the remaining users in this category were assumed to stay at the current (1995) demand level.

Power Generation Water-Use Projections

Projections for the five major power plants were provided directly by the users. This includes the Crist (Escambia County), Scholz (Jackson County), and Smith (Bay County) plants of Gulf Power Company and the Hopkins (Leon County) and Purdom (Wakulla County) Plants of the City of Tallahassee. Projections were also provided by a small private power generating facility, Timber Energy Incorporated (Liberty County). According to Gulf Power Company and the City of Tallahassee, no new power plants are planned over the next 10 years. No information was available beyond then. The Purdom Plant is in line to be expanded over the next 5 years, and projections by the City of Tallahassee for this facility reflect this change. Projections provided for each facility include demands for both fresh and saline water. Most of the freshwater used as well as all of the saline water used for power generation is used for once-through cooling, and nearly all of this water is returned to its source.

Recreational Irrigation (Golf Course) Water-Use Projections

Projections for golf course irrigation water use were made by applying a fixed application rate per acre based on geographic location to the number of acres irrigated per county. The application rate was determined using one of two permitted rates—coastal or inland. For golf courses in coastal Counties (Bay, Escambia, Franklin, Gulf, Okaloosa, Santa Rosa, and Walton) 30 inches per acre was used as the application rate, and for golf courses in inland Counties (Calhoun, Gadsden, Holmes, Jackson, Jefferson, Leon, Liberty, Wakulla, and Washington), 21 inches per acre was used as the application rate (Angela Chelette, Northwest Florida Water Management District, April 1998, written commun.). These rates are generated from the AFSIRS computer model (Smajstrla, 1986) and are estimated to be for the average year.

Golf course acreage was estimated by multiplying the number of golf course holes per county by a statewide average of 4.5 acres per hole (Fernald and Purdum, 1998). The number of golf course holes was

obtained from the master list of golf courses compiled for this project from several sources. These sources included the NWFWMD water-use permit data base, and the Florida Sports Foundation, Fairways in the Sunshine, Official Florida Golf Guide (Florida Sports Foundation, 1994), the Florida Atlas and Gazetteer (DeLorme Publishing Company, 1986), and the National Golf Foundation (National Golf Foundation, 1997). This method was used because the acreage information obtained from the golf course surveys was incomplete.

In addition to existing golf courses, a projection of additional golf course holes per county was made. A ratio of people per golf course hole was developed for 1995 by dividing a county's total population by the total number of golf course holes in that county. This ratio was then multiplied by the projected population to estimate the future number of golf course holes per county. The number of holes was rounded to increments of nine to reflect potential golf course development. The projected number of holes was then multiplied by 4.5 acres per hole to obtain future acreage. The projected acreage was then multiplied by the appropriate application rate (21 or 30 inches per acre) to project water use.

WATER-USE PROJECTION FOR THE NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

The projected population for the NWFWMD was made using the methods described previously. Population for the NWFWMD is projected to reach 1,596,888 by the year 2020 (table 3 and fig. 14). This is an increase of 41 percent (464,639) between 1995 and 2020. These estimates compare favorably to the 1,595,900 estimated by BEBR in their medium population projection for the 16 counties within the NWFWMD for the year 2020 (Smith and Nogle, 1997); there was a difference of less than 1 percent between the two projections. The population served by public supply for the NWFWMD is projected to reach 1,353,836 by the year 2020 (table 3 and fig. 14)—an increase of nearly 46 percent (427,707) between 1995 and 2020.

Total water demand for the NWFWMD is projected to reach 940.2 Mgal/d in 2000, 1,003.1 Mgal/d in 2010, and 1,059.1 Mgal/d in 2020 (table 4). This represents a 19 percent increase between 1995 and 2020, but a 1.5 percent decrease between 1970 and 2020. The

decrease between 1970 and 2020 is a result of high water usage at several power plants during the 1970's, which decreased substantially by 1995 and will remain at this level through 2020. Excluding water withdrawn for power generation needs from these totals, water demands will increase 34 percent between 1995 and 2020, and 58 percent between 1970 and 2020. Specifically, public supply demands are projected to increase 74.1 Mgal/d (53 percent), and demands by domestic self-supplied and small public supply systems are projected to increase 9.1 Mgal/d (28 percent) between 1995 and 2020. Combined, projected water needs for drinking water purposes in the NWFWMD will increase about 83.2 Mgal/d (48 percent) between 1995 and 2020 (fig. 15). Commercial-industrial self-supplied demands are projected to increase about 16.9 Mgal/d (13 percent) between 1995 and 2020 (fig. 15). Agricultural and recreational irrigation demands, combined, are projected to increase 16.8 Mgal/d (48 percent) between 1995 and 2020 (fig. 15). Water demands for power generation are projected to increase about 53.9 Mgal/d (10 percent) between 1995 and 2020. Although power generation water use shows an increase during this time, plant capacities are not projected to change dramatically. The increase is actually a result of several plants not operating at capacity during 1995, and projecting that they will by 2020. Additionally, nearly all (99 percent) of the water withdrawn for power generation purposes in 1995 was returned to its source.

Population and Water-Use Projections by Planning Region

Population projections indicate that PR II will account for the largest population by the year 2020, followed by PR VII, and PR I (table 3). Combined, these three PRs will account for 75 percent of the District's total population by the year 2020. Planning Region II will account for the largest population served by public supply by the year 2020, followed by PR I, and PR VII (table 3). Combined, these three PRs will account for 80 percent of the District's population served by public supply in the year 2020.

Water use projections indicate that the demands will increase in most of the seven Planning Regions over the next 25 years (fig. 16). Planning Region III will continue to be the largest user of water, but the largest increase will occur in PR II and VII. Between

Table 3. Projected population and population served by public supply by Planning Region and county in the Northwest Florida Water Mangement District, 1970-2020

[All values in million gallons per day; modified from Marella 1995; and Moss and de Bodisco, 1998]

	1995		2000		2005		2010		2015		2020	
	Total	Population										
	Population	Served										
Planning Region I	282,742	246,878	300,372	273,287	316,471	292,060	332,570	311,195	348,669	330,788	364,768	350,965
Escambia	282,742	246,878	300,372	273,287	316,471	292,060	332,570	311,195	348,669	330,788	364,768	350,965
Planning Region II	292,213	269,711	326,914	301,075	351,743	325,892	378,640	352,485	409,918	378,980	442,351	403,574
Okaloosa	162,707	149,665	172,982	158,482	187,128	172,701	201,275	184,220	215,421	195,747	229,567	205,438
Santa Rosa	96,091	90,247	118,412	110,805	126,164	118,511	135,770	130,912	149,300	143,353	162,475	155,826
Walton	33,415	29,799	35,520	31,788	38,451	34,680	41,595	37,353	45,197	39,880	50,309	42,310
Planning Region III	139,173	127,562	145,364	135,829	155,763	143,456	166,162	151,192	176,561	159,046	186,960	167,039
Bay	139,173	127,562	145,364	135,829	155,763	143,456	166,162	151,192	176,561	159,046	186,960	167,039
Planning Region IV	101,833	32,084	100,236	33,360	105,023	35,131	110,633	37,138	116,270	39,387	122,227	41,864
Calhoun	11,988	4,455	11,916	4,382	12,641	4,689	13,410	5,003	14,225	5,324	15,090	5,637
Holmes	17,385	3,864	17,574	3,997	18,572	4,056	19,627	4,110	20,742	4,161	21,920	4,212
Jackson	46,577	14,870	44,727	15,487	45,696	16,081	47,211	16,796	48,454	17,632	49,696	18,589
Liberty	6,873	2,020	6,767	1,971	7,507	2,057	8,327	2,152	9,238	2,255	10,248	2,370
Washington	19,010	6,875	19,252	7,523	20,607	8,248	22,058	9,077	23,611	10,015	25,273	11,056
											<u> </u>	
Planning Region V	23,507	20,034	24,539	21,112	27,020	23,478	30,177	26,057	34,241	29,248	39,558	32,279
Franklin	10,236	9,926	11,251	10,680	12,738	12,060	14,634	13,626	17,048	15,796	20,126	17,777
Gulf	13,271	10,108	13,288	10,432	14,282	11,418	15,543	12,431	17,193	13,452	19,432	14,502
Planning Region VI	44,734	29,619	44,982	29,227	46,557	29,933	48,372	30,340	50,426	30,604	52,719	30,810
Gadsden	44,734	29,619	44,982	29,227	46,557	29,933	48,372	30,340	50,426	30,604	52,719	30,810
Planning Region VII	248,047	200,241	275,013	217,353	303,985	243,041	332,746	268,582	360,931	297,659	388,305	327,305
Jefferson	13,509	4,788	13,718	5,132	14,534	5,773	15,349	6,494	16,165	7,304	16,980	8,216
Leon	217,533	186,440	241,272	202,032	265,840	225,270	289,555	248,008	311,934	273,832	332,610	299,654
Wakulla	17,005	9,013	20,023	10,189	23,611	11,998	27,842	14,080	32,832	16,523	38,715	19,435

Totals 1,132,249 926,129 1,217,420 1,011,243 1,306,562 1,092,991 1,399,300 1,176,989 1,497,016 1,265,712 1,596,888 1,353,836

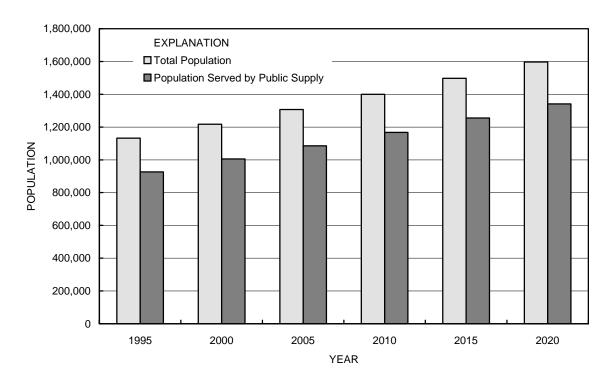


Figure 14. Projected population and population served by public supply in the Northwest Florida Water Management District, 1995-2020. (1995 total population from University of Florida, 1996)

1970 and 1990, water use trends were influenced by fluctuations in power generation usage or extreme climatic conditions (primarily rainfall) that increased or decreased public supply and irrigation demands. Although projections for each Planning Region is consistent through 2020, extreme climate conditions can dramatically affect water demands for a given year.

Planning Region I

The population of PR I is projected to increase from 282,742 in 1995 to 364,768 in 2020 (table 3). This is an increase of 29 percent between 1995 and 2020. The population served by public supply is projected to reach 350,965 by 2020 (table 3), which is an increase of 32 percent between 1995 and 2020.

Total water demand for PR I is projected to increase to 300.1 Mgal/d by the year 2020, an 11 percent increase from 1995 (table 4). Excluding water withdrawn for power generation needs, water use will increase 19 percent between 1995 and 2020. Specifically, public supply demands are projected to increase 10.8 Mgal/d while demands from domestic self-supplied and small public supply systems are projected to decrease by about 3.5 Mgal/d between 1995 and 2020.

Combined, projected water needs for drinking water purposes in PR I will increase 7.3 Mgal/d (17 percent) between 1995 and 2000 (fig. 17). Commercial-industrial self-supplied demands are projected to increase about 12 Mgal/d (19 percent) between 1995 and 2020 (fig. 17). Agricultural and recreational irrigation demands combined are projected to increase 0.9 Mgal/d (44 percent) between 1995 and 2020 (fig. 17). Water demands for power generation are projected to remain between 165 and 175 Mgal/d through 2020. Water use and population projections for the individual water users within PR I are detailed in Appendix 4.

Planning Region II

The population of PR II is projected to increase from 292,213 in 1995 to 442,351 in 2020 (table 3). This is an increase of 51 percent between 1995 and 2020. The population served by public supply is projected to reach 403,574 by 2020 (table 3), an increase of 50 percent between 1995 and 2020. Planning Region II includes Okaloosa, Santa Rosa, and Walton Counties, in which populations are projected to reach 229,567, 162,475, and 50,309, respectively, by the year 2020 (table 3). The majority of the population (65 percent) in

Water-Use Projection for the Northwest Florida Water Management District

Table 4. Historical and projected water use by Planning Region and county in the Northwest Florida Water Management District, 1970-2020 [All values in million gallons per day; modified from Marella 1995; and Moss and de Bodisco, 1998]

Γ	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Planning Region I	322.54	375.88	427.79	337.88	285.91	270.69	277.39	282.69	288.34	294.12	300.14
Escambia	322.54	375.88	427.79	337.88	285.91	270.69	277.39	282.69	288.34	294.12	300.14
Planning Region II	34.03	42.16	49.87	45.06	53.28	60.00	66.57	72.74	79.25	86.68	94.65
Okaloosa	15.66	17.61	21.41	25.46	30.40	30.86	33.95	36.51	39.67	42.98	46.67
Santa Rosa	15.60	22.28	25.20	15.23	17.85	21.35	23.92	26.70	29.17	32.16	34.98
Walton	2.77	2.27	3.26	4.37	5.03	7.79	8.70	9.53	10.41	11.54	13.00
Planning Region III	319.10	266.18	446.10	312.74	283.62	315.39	319.34	326.19	333.88	338.15	343.32
Bay	319.10	266.18	446.10	312.74	283.62	315.39	319.34	326.19	333.88	338.15	343.32
Planning Region IV	168.02	143.04	140.07	124.31	133.64	81.85	119.17	124.49	132.43	134.68	138.37
Calhoun	2.04	2.71	3.42	3.14	3.74	3.92	5.27	5.76	6.37	6.95	7.63
Holmes	1.23	1.08	1.98	2.84	3.39	4.78	4.97	5.44	5.92	6.28	6.63
Jackson	161.23	136.65	131.44	114.83	121.47	67.28	102.37	106.30	112.68	113.47	115.57
Liberty	1.72	0.66	0.73	0.65	1.40	1.62	1.78	2.02	2.28	2.57	2.88
Washington	1.80	1.94	2.50	2.85	3.64	4.25	4.78	4.97	5.18	5.41	5.66
Planning Region V	37.79	36.02	36.72	35.17	36.89	32.27	32.54	32.85	33.19	33.78	34.44
Franklin	0.87	1.12	1.30	1.35	1.82	1.77	2.03	2.26	2.51	2.81	3.23
Gulf	36.92	34.90	35.42	33.82	35.07	30.50	30.51	30.59	30.68	30.97	31.21
Planning Region VI	11.02	10.53	11.54	11.91	13.79	12.50	13.32	13.01	14.29	14.89	15.78
Gadsden	11.02	10.53	11.54	11.91	13.79	12.50	13.32	13.01	14.29	14.89	15.78
Planning Region VII	183.07	135.02	123.10	66.81	96.73	115.58	111.83	116.42	121.76	127.06	132.41
Jefferson	6.03	7.11	7.45	4.52	6.41	6.64	6.83	6.88	7.40	7.71	8.08
Leon	15.27	20.56	26.90	31.44	35.84	37.10	41.82	45.75	50.00	54.39	58.79
Wakulla	161.77	107.35	88.75	30.85	54.48	71.84	63.18	63.79	64.36	64.96	65.54
Totals	1,075.57	1,008.83	1,235.19	933.88	903.86	888.28	940.16	968.39	1,003.14	1,029.36	1,059.11

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

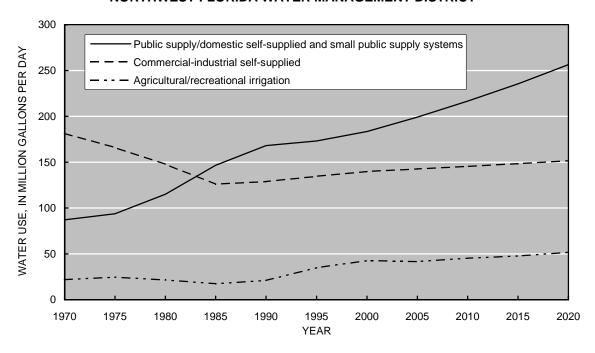


Figure 15. Historical and projected water use for the Northwest Florida Water Management District by major category, 1970-2020. (Values do not include power generation water use; modified from Marella, 1995; and Moss and de Bodisco, 1998)

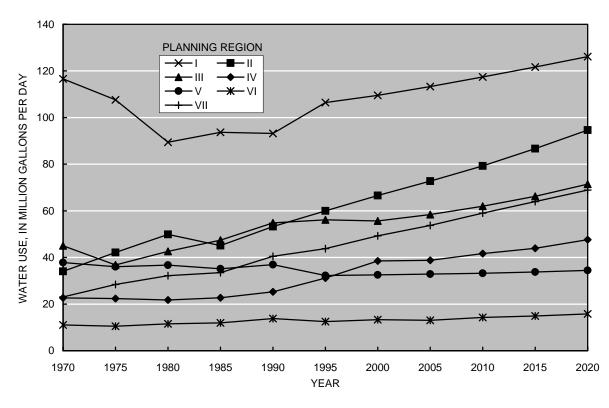


Figure 16. Historical and projected water use for the Northwest Florida Water Management District by Planning Region, 1970-2020. (Values do not include power generation water use; modified from Marella, 1995; and Moss and de Bodisco, 1998)

REGION I

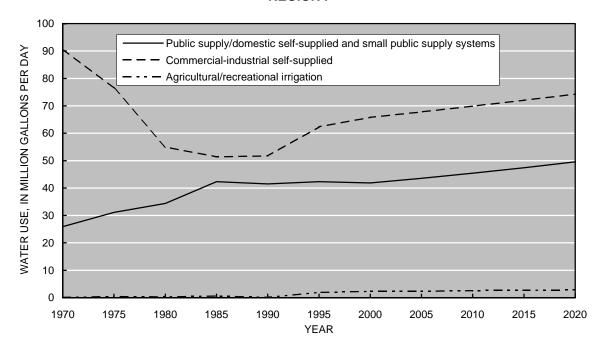


Figure 17. Historical and projected water use for Planning Region I by major category, 1970-2020. (Values do not include power generation water use; modified from Marella, 1995; and Moss and de Bodisco, 1998)

PR II is expected to continue to live within ASC 1 (figs. 3 and 5), as the population of this ASC is projected to reach 287,665 by 2020. In addition to permanent residents, seasonal populations and daily visitors will continue to be a large part of ACS 1, especially during the summer months.

Total water demand for PR II is projected to increase to 94.7 Mgal/d by the year 2020, a 58 percent increase from 1995 (table 4). Specifically, public supply demands are projected to increase 25.2 Mgal/d while demands from domestic self-supplied and small public supply systems are projected to increase by about 2.9 Mgal/d between 1995 and 2020. Combined, projected water needs for drinking water purposes in PR II will increase 28.1 Mgal/d (68 percent) between 1995 and 2000 (fig. 18). Commercial-industrial selfsupplied demands are projected to increase about 4.5 Mgal/d (38 percent) between 1995 and 2020 (fig. 18). Agricultural and recreational irrigation demands combined are projected to increase 2.1 Mgal/d (31 percent) between 1995 and 2020 (fig. 18). Water-use and population projections for the individual water users within PR II are detailed in Appendix 5.

Planning Region III

The population of PR III is projected to increase from 139,173 in 1995 to 186,960 in 2020 (table 3). This is an increase of 34 percent between 1995 and 2020. The population served by public supply is projected to reach 167,039 by 2020 (table 3), an increase of 31 percent between 1995 and 2020. A large portion of the population in PR III lives along the coast or in the urban area within ASC 4 (figs. 3 and 6). The population of this ASC for the year 2020 is projected to reach 52,349 or 28 percent of the total population of PR III. In addition to permanent residents, seasonal populations and daily visitors will continue to be a large part of PR III and ASC 4, especially during the summer months.

Total water demand for PR III is projected to increase to 343.3 Mgal/d by the year 2020, a 9 percent increase from 1995 (table 4). Excluding water withdrawn for power generation needs, water use will increase 27 percent between 1995 and 2020. Specifically, public supply demands are projected to increase 12.6 Mgal/d while demands from domestic self-supplied and small public supply systems are projected to increase by about 2.1 Mgal/d between 1995 and 2020. Combined, projected water needs for drinking water

REGION II

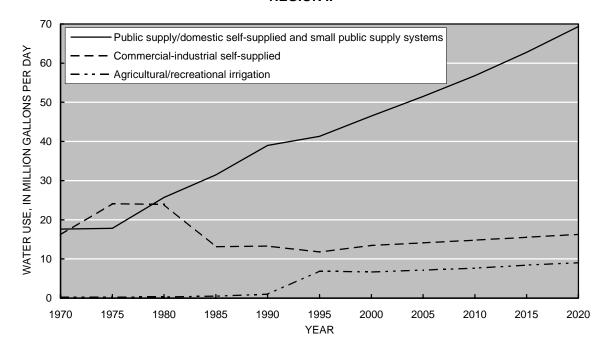


Figure 18. Historical and projected water use for Planning Region II by major category, 1970-2020. (Modified from Marella, 1995; and Moss and de Bodisco, 1998)

purposes in PR III will increase 14.6 Mgal/d (55 percent) between 1995 and 2000 (fig. 19). Commercial-industrial self-supplied demands are projected to remain between 27 and 28 Mgal/d through 2020 (fig. 19). Most of the water used for commercial-industrial will be provided by public supply, but for projection purposes it was included under the commercial-industrial self-supplied category. Agricultural and recreational irrigation demands combined are projected to increase 0.6 Mgal/d (32 percent) between 1995 and 2020 (fig. 19). Water demands for power generation are projected to remain between 260 and 275 Mgal/d through 2020. Water-use and population projections for the individual water users within PR III are detailed in Appendix 6.

Planning Region IV

The population of PR IV is projected to increase from 101,833 in 1995 to 122,227 in 2020 (table 3). This is an increase of 20 percent between 1995 and 2020. The population served by public supply is projected to reach 41,864 by 2020 (table 3), an increase of 30 percent between 1995 and 2020. Planning Region IV includes Calhoun, Holmes, Jackson, Liberty, and Washington Counties, in which populations are pro-

jected to reach 15,090, 21,920, 49,696, 10,248, and 25,273, respectively, by the year 2020 (table 3). The majority of the population in PR IV will continue to live in rural areas throughout these five counties.

Total water demand for PR IV is projected to increase to 138.4 Mgal/d by the year 2020, a 69 percent increase from 1995 (table 4). Excluding water withdrawn for power generation needs, water use will increase 53 percent between 1995 and 2020. Specifically, public supply demands are projected to increase 2.6 Mgal/d while demands from domestic self-supplied and small public supply systems are projected to increase by about 4.4 Mgal/d between 1995 and 2020. Combined, projected water needs for drinking water purposes in PR IV will increase 6.9 Mgal/d (40 percent) between 1995 and 2000 (fig. 20). Commercialindustrial self-supplied demands are projected to remain at about 2.0 Mgal/d between 1995 and 2020 (fig. 20). Agricultural and recreational irrigation demands combined are projected to increase 9.5 Mgal/d (79 percent) between 1995 and 2020 (fig. 20). Water demands for power generation are projected to remain between 80 and 90 Mgal/d through 2020. Water-use and population projections for the individual water users within PR IV are detailed in Appendix 7.

REGION III

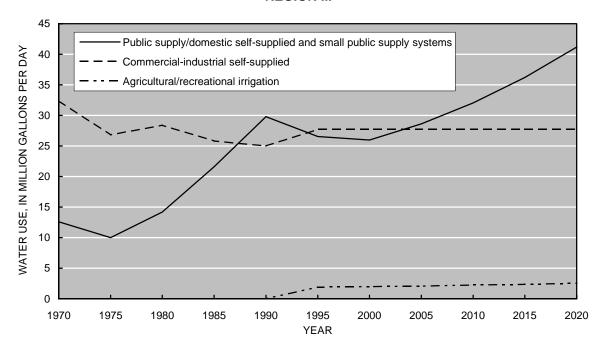


Figure 19. Historical and projected water use for Planning Region III by major category, 1970-2020. (Values do not include power generation water use; modified from Marella, 1995; and Moss and de Bodisco, 1998.)

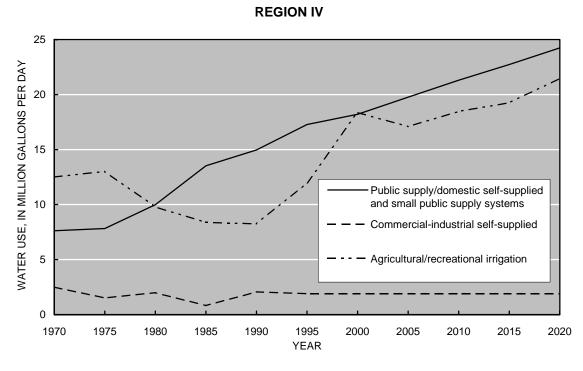


Figure 20. Historical and projected water use for Planning Region IV by major category, 1970-2020. (Values do not include power generation water use; modified from Marella, 1995; and Moss and de Bodisco, 1998.)

REGION V

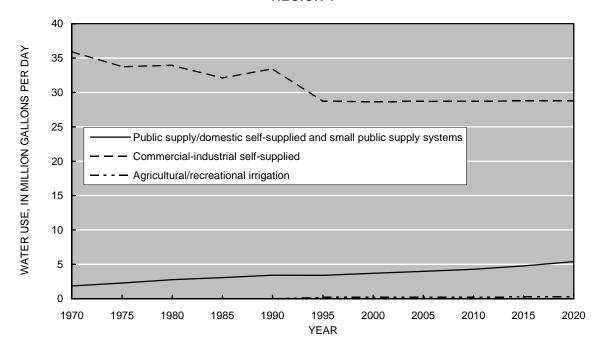


Figure 21. Historical and projected water use for Planning Region V by major category, 1970-2020. (Modified from Marella, 1995; and Moss and de Bodisco, 1998)

Planning Region V

The population of PR V is projected to increase from 23,507 in 1995 to 39,558 in 2020 (table 3). This is an increase of 68 percent between 1995 and 2020. The population served by public supply is projected to reach 32,279 by 2020 (table 3), an increase of 61 percent between 1995 and 2020. Planning Region V includes Franklin and Gulf Counties, in which populations are projected to reach 20,126 and 19,432, respectively, by the year 2020 (table 3). The majority of the population (86 percent) in PR V lives along the coast in ASC 2 and ASC 3 (figs. 3 and 8). The population of ASC 2 for the year 2020 is projected to reach 14,574 while the population of ACS 3 is projected to reach 19.522 by the year 2020. In addition to the permanent population in PR V, seasonal populations increase substantially during the summer months in the coastal communities and is expected to continue.

Total water demand for PR V is projected to increase to 34.4 Mgal/d by the year 2020, a 7 percent increase from 1995 (table 4). Specifically, public supply demands are projected to increase 1.5 Mgal/d, while demands from domestic self-supplied and small public supply systems are projected to increase by about 0.5 Mgal/d between 1995 and 2020. Combined, projected water needs for drinking water purposes in

PR V will increase 2.0 Mgal/d (59 percent) between 1995 and 2000 (fig. 21). Commercial-industrial self-supplied demands are projected to remain between 28 and 29 Mgal/d between 1995 and 2020 (fig. 21). Agricultural and recreational irrigation demands combined are projected to increase 0.1 Mgal/d (50 percent) between 1995 and 2020 (fig. 21). Water-use and population projections for the individual water users within PR V are detailed in Appendix 8.

Planning Region VI

The population of PR VI is projected to increase from 44,734 in 1995 to 52,719 in 2020 (table 3). This is an increase of 18 percent between 1995 and 2020. The population served by public supply is projected to reach 30,810 by 2020 (table 3), an increase of 4 percent between 1995 and 2020. Within PR VI is ASC 5, which covers the central part of Gadsden County (fig. 9). The population of this ASC for the year 2020 is projected to reach 39,539 or 75 percent of the total population of PR VI.

Total water demand for PR VI is projected to increase to 15.8 Mgal/d by the year 2020, a 26 percent increase from 1995 (table 4). Specifically, public supply demands are projected to increase 0.6 Mgal/d,

REGION VI

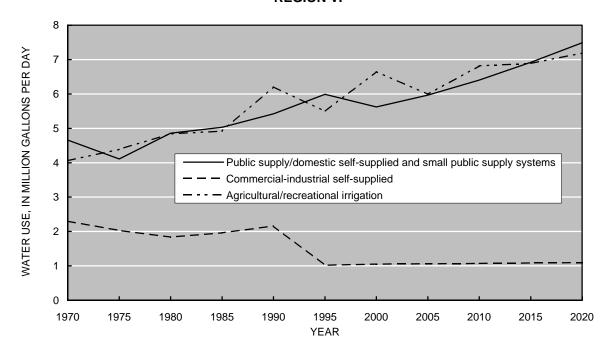


Figure 22. Historical and projected water use for Planning Region VI by major category, 1970-2020. (Modified from Marella, 1995; and Moss and de Bodisco, 1998)

while demands from domestic self-supplied and small public supply systems demands are projected to increase by about 0.9 Mgal/d between 1995 and 2020. Combined, projected water needs for drinking water purposes in PR VI will increase 1.5 Mgal/d (25 percent) between 1995 and 2000 (fig. 22). Commercial-industrial self-supplied demands are projected to remain near 1 Mgal/d between 1995 and 2020 (fig. 22). Agricultural and recreational irrigation demands combined are projected to increase 1.7 Mgal/d (31 percent) between 1995 and 2020 (fig. 22). Water-use and population projections for the individual water users within PR VI are detailed in Appendix 9.

Planning Region VII

The population of PR VII is projected to increase from 248,047 in 1995 to 388,305 in 2020 (table 3). This is an increase of nearly 57 percent between 1995 and 2020. The population served by public supply is projected to reach 327,305 by 2020 (table 3), an increase of 63 percent between 1995 and 2020. Planning Region VII includes all of Jefferson, Leon, and Wakulla Counties, in which populations are projected to reach 16,980, 332,610, and 38,715 by the year 2020 respec-

tively (table 3). The majority of the population in PR VII will continue to reside in the urban area associated with the City of Tallahassee.

Total water demand for PR VII is projected to increase to 132.4 Mgal/d by the year 2020, a 15 percent increase from 1995 (table 4). Excluding water withdrawn for power generation needs, water use will increase 57 percent between 1995 and 2020. Specifically, public supply systems demands are projected to increase 21.1 Mgal/d, while demands from domestic self-supplied and small public supply systems are projected to increase by about 1.8 Mgal/d between 1995 and 2020. Combined, projected water needs for drinking water purposes in PR VII will increase 22.9 Mgal/d (63 percent) between 1995 and 2000 (fig. 23). Commercial-industrial self-supplied demands are projected to remain between 1.0 and 1.5 Mgal/d through 2020 (fig. 23). Agricultural and recreational irrigation demands combined are projected to increase 1.9 Mgal/d (30 percent) between 1995 and 2020 (fig. 23). Water demands for power generation are projected to remain between 60 and 70 Mgal/d through 2020. Water-use and population projections for the individual water users within PR VII are detailed in Appendix 10.

REGION VII

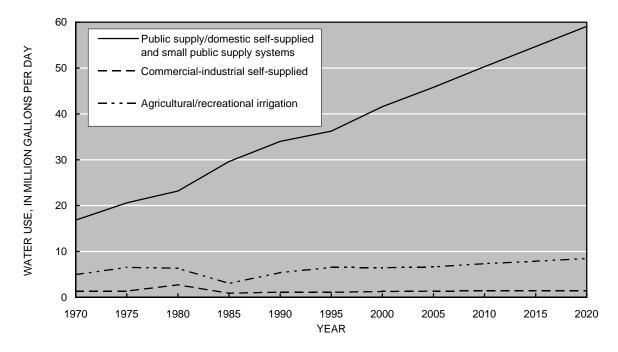


Figure 23. Historical and projected water use for Planning Region VII by major category, 1970-2020. (Values do not include power generation water use; modified from Marella, 1995; and Moss and de Bodisco, 1998)

SUMMARY

The Northwest Florida Water Management District is located in the western panhandle of Florida and encompasses about 11,200 square miles. In 1995, the District had an estimated population of 1.13 million, an increase of about 47 percent from the 1975 population of 0.77 million. Over 50 percent of the resident population lives within 10 miles of the coast. In addition, hundreds of thousands of visitors come to the coastal areas of the panhandle during the summer months for recreation and vacation purposes. Water withdrawn to meet demands for public supply, domestic self-supplied, commercial-industrial, agricultural irrigation, and recreational irrigation purposes in the District has increased 18 percent (52 Mgal/d) between 1970 and 1995. The greatest increases were for public supply and domestic self-supplied (99 percent increase) and agricultural irrigation (60 percent increase) between 1970 and 1995. In 1995, approximately 70 percent of the water withdrawn for these purposes was from ground-water sources, with the majority of this from the Floridan aguifer system. The increase in water demands has affected water levels in the Floridan aquifer system, especially along the coastal areas. The NWFWMD is mandated under the

Florida Statutes (Chapter 373) to protect and manage the water resources in this area of the State. The mandate includes meeting current and future demands while ensuring that adequate amounts of water remain available to sustain water resources and water dependent natural systems.

For this project, curve fitting and extrapolation were used to project most of the variables (population, population served by public supply, and water use) for the years 2000, 2005, 2010, 2015, and 2020. This mathematical method is based on the fitting of a curve to historical population or water-use data and then extending this curve to arrive at future values. Six of the most widely used curves for this type of process are linear, geometric, parabolic, modified exponential, Gompertz, and logistic. Several techniques were used to determine which of the six curves best fit the historical trend. These techniques include 1) visual examination, 2) evaluative statistics, and 3) other data or known limitations.

The public-supply category refers to water supplied by a publicly or privately owned water system for public distribution. Projections were calculated for all utilities that used more than 0.10 Mgal/d in 1995 or that were projected to reach 0.10 Mgal/d by 2020

within each county and ASC. Projections for public supply water use were made by using historical water-use values for a 6-year (1991-96), 9-year (1988-96), or 12-year (1985-96) period between 1985 and 1996. The period selected was based on the reliability of the data and the pattern of water use for each utility or user.

Domestic self-supplied use includes water withdrawn by individual households and water withdrawn by the small public supply systems not inventoried under public supply. Water-use projections for domestic self-supplied and small public supply systems water use were made by multiplying the population of the county not served by public supply by per capita use value.

Commercial-industrial self-supplied use includes water withdrawn at commercial, industrial, and mining facilities. Projections for the 14 major self-supplied commercial-industrial facilities were made based upon information provided directly from the users, which included the annual daily average water use. Values for the remaining users in this category were assumed to stay at current (1995) levels.

Power generation use includes water withdrawn at thermoelectric power generation facilities and includes fresh and saline water withdrawn for all uses at these facilities. Projections for five power plants and the one small power provider in the District were made based on information provided by the owners or facility.

Recreational irrigation use includes the artificial application of water on lands to assist in the growing of golf course turf grass. Projections for golf course irrigation were made by applying a fixed application rate per acre based on geographic location (30 inches per acre in coastal areas or 21 inches per acre for inland areas) to each golf course and multiplied by the number of acres irrigated. A ratio of people per golf course hole was developed and applied to project future water use. This ratio was then multiplied by the projected population to determine the additional number of golf course holes per county or Planning Region (rounded in nine hole increments). The projected number of holes was multiplied by the number of acres per hole and then by the appropriate application rate.

The population for the NWFWMD is projected to reach 1,596,888 by the year 2020 - an increase of 41 percent between 1995 and 2020. Most of the population in the District will continue to reside in the urban areas of Pensacola and Tallahassee, and along the coastal areas. Population projections indicate that PR II

will account for the largest population by the year 2020, followed by PR VII, and PR I. Combined, these three Planning Regions will account for 75 percent of the District's total population by the year 2020. The population served by public supply for the NWFWMD is projected to reach 1,353,836 by the year 2020 - an increase of nearly 46 percent between 1995 and 2020.

Total water demand for the NWFWMD is projected to reach 940.2 Mgal/d in 2000, 1,003.1 Mgal/d in 2010, and 1,059.1 Mgal/d in 2020. Excluding water withdrawn for power generation needs from these totals, water demands will increase 34 percent between 1995 and 2020 and 58 percent between 1970 and 2020. Specifically, public supply demands are projected to increase 74.1 Mgal/d (53 percent), and demands from domestic self-supplied and small public supply systems are projected to increase 9.1 Mgal/d (28 percent) between 1995 and 2020. Combined, projected water needs for drinking water purposes in the NWFWMD will increase about 83.2 Mgal/d (48 percent) between 1995 and 2020. Commercial-industrial self-supplied demands are projected to increase about 16.9 Mgal/d (13 percent) between 1995 and 2020. Agricultural and recreational irrigation demands, combined, are projected to increase 16.8 Mgal/d (48 percent) between 1995 and 2020. Water demands for power generation are projected to increase about 53.9 Mgal/d (10 percent) between 1995 and 2020. Although power generation water use shows an increase during this time, plant capacities are not projected to change during this period. Water-use projections indicate that the demands will increase in most of the seven Planning Regions over the next 25 years. Planning Region III will continue to be the largest user of water, but the largest increase will occur in PR II and VII.

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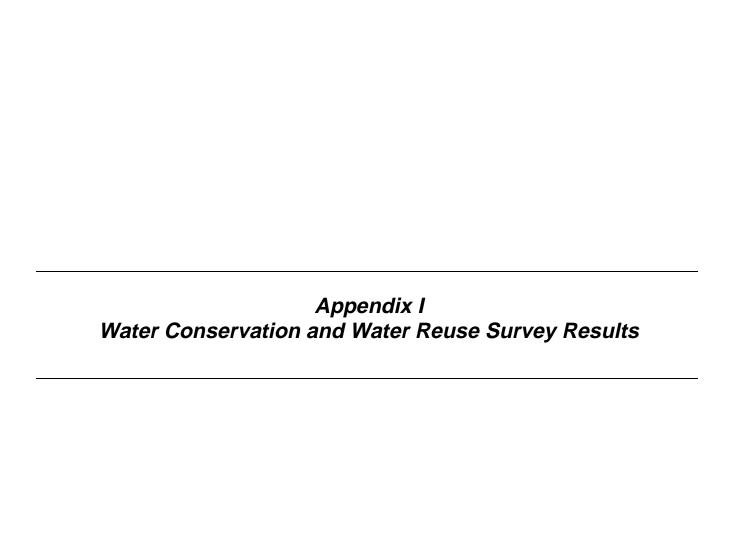
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Summary of Conservation-Related Questionnaire Responses

Utility	County	Planning	Conservation Rate Structure (residential)	-andscape irrigation estrictions	Low volume plumbing building codes	Xeriscape landscape ordinances	Leak detection programs	Water conservation public education	Water shortage plan	Reuse efforts	Other (current unless otherwise noted)
,	,	Region		ב ב	ه ت	Χō					(current unless otherwise noted)
Escambia County Utilities	Escambia	1	=	*	*	*	X	X	X *	X	
Destin	Okaloosa	2	+				X	X	*	X	
Fort Walton Beach	Okaloosa	2	+	*	X	Х	X	X		X *	
Hurlburt Field	Okaloosa	2	N/A	-	Х	· · ·	Χ	X	*	X	
Mary Esther	Okaloosa	2	+	*		X *	*	X			DI 1 (1 1 6)
Niceville	Okaloosa	2	+		X			X	Χ	X	Planned: surface water drafting
OCWS - Bluewater	Okaloosa	2	=		X	X	X	X		*	
OCWS - Garniers	Okaloosa	2	=		X	Х	X	X			
OCWS - Mid County	Okaloosa	2	=		X		X	X			
OCWS - West	Okaloosa	2	=		X	Х	Χ	Х			
Valparaiso	Okaloosa	2	=	*	Х			*			
Midway	Santa Rosa	2	+	*				_ ^		Х	Escalating water rates for high end users
Milton	Santa Rosa	2		Χ				Χ	*		
Navarre Beach	Santa Rosa	2		*	Χ	*	*	*	*		
Point Baker	Santa Rosa	2	=								
Florida Community Services	Walton	2	N/A	Х	Х	*	Х	Х	Х	Х	Punitive rate schedule to discourage landscape irrigation
South Walton Utilities	Walton	2	+	Х	Х		*		*	Χ	
Bay County Public Utilities	Bay	3									
Lynn Haven	Bay	3	=		Х					*	
Parker	Bay	3			Х		Χ	*	Χ		
Springfield	Bay	3	=								
Tyndall AFB	Bay	3	N/A							*	
Graceville	Jackson	4	=								
Alligator Point	Franklin	5	+					Х			Planned: meter all customer
Eastpoint	Franklin	5								Χ	
Lanark Village	Franklin	5	=		Х		*	Х			Planned: meter all customer
Lighthouse Utilities	Gulf	5	II			*	Χ	Х			
Florida State Hospital	Gadsden	6									Landscape designed with low maintenance plants with minimum irrigation requirements. All irrigation on timers for efficient use of water
Greensboro	Gadsden	6									
Havana	Gadsden	6	=				Х	Х			
Talquin - Gadsden Regional	Gadsden	6	+								
Monticello	Jefferson	7									
Tallahassee	Leon	7									
Talquin - Bradfordville	Leon	7	+	Χ	Х	*	Χ	Х	Χ	*	
Talquin - Lake Jackson	Leon	7	+	Χ	Х	*	Χ	Х	Χ	*	
Talquin - Leon East	Leon	7	+	Χ	Х	*	Χ	Х	Χ	*	
Talquin - Leon South	Leon	7	+	Χ	Х	*	Х	Х	Χ		
Talquin - Pineridge	Leon	7	+	X	Х	*	X	X	X		
Sopchoppy	Wakulla	7	-								
Talquin - Gulf Coast	Wakulla	7	+	Χ	Х	*	Χ	Х	Х	*	

X Current

* Planned

N/A Not Applicable

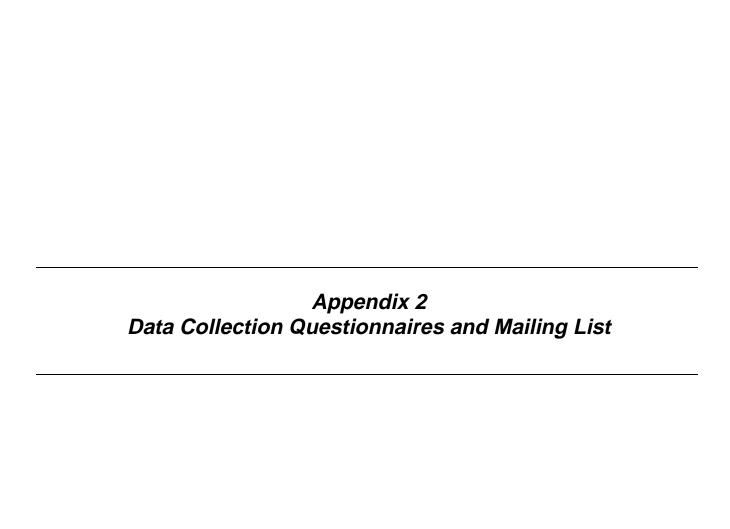
- = Flat rate structure
- (-) Rate structure (increased water use=lower rates)
- + (+) Rate structure (increased water use=higher rates)

If user is listed with blank spaces, then information concerning programs was not provided through the questionnaire For users not listed, no survey was received

DEP Annual Reuse Reports Summary

			1	Planning		Disinfection	Canacity in	Ava Flow			Area in
	Facility Name	Location	County	Region	DEP ID#	Level	Mgal/d	1996	Reuse Type	SubType	Acres
1	ECU - Bayou Marcus Water Reclamation Facility	Pensacola	Escambia	1	1017C02213	basic	2.000	1.599	Industrial	Treatment plant	N/A
	ECU - Cantonment WWTP	Cantonment	Escambia	 1	1017C72366	basic	0.700	0.449	Industrial	Treatment plant	N/A
	ECU - Main Street WWTP	Pensacola	Escambia	1	1017M01012	basic	20.000		Industrial	Treatment plant	N/A
	ECU - Pensacola Beach WWTP	Pensacola Beach	Escambia	<u>.</u> 1	1017M10769	IM	2.400		Industrial	Treatment plant	N/A
	Moreno Court WWTP	Pensacola	Escambia	1	FLA010049001	Low	0.140			Rapid infiltration basins	
6	Crestview WWTP, Spray Field System	Crestview	Okaloosa	2	1046M08287	basic	2.100			Other crops	240
7	Destin Water Users	Destin	Okaloosa	2	1046P01503	H1	1.200	0.350	Public access	Golf course irrigation	153.1
	Destin Water Users	Destin	Okaloosa	2	1046P01504	H1	0.658	0.250	Public access	Other public access	90
9	Destin Water Users	Destin	Okaloosa	2	1046P01505	H1	0.300	0.094	GW recharge	Absorption fields	7.01
10	Fort Walton Beach Municipal Golf Course	Fort Walton Beach	Okaloosa	2	1046M05905	basic	3.100	2.911	Public access	Other Public Access	428
11	Fort Walton Beach Municipal Golf Course	Fort Walton Beach	Okaloosa	2	1046M05906	H1	1.550	0.407	Public access	Golf course irrigation	330
12	Hurlburt Field - East Bay Swamp (receiving wetland)	Mary Esther	Okaloosa	2	FLA010187	basic	1.000	0.669	Wetlands	N/A	660
13	Mary Esther Sprayfield	Mary Esther	Okaloosa	2	FLA010191	0.5	1.100	0.645	Ag. Irrigation	Other crops	180
	NVOC Regional Sewer Board	Niceville	Okaloosa	2	FLA010185	basic	3.000	2.200	Ag. Irrigation	Hay	290
15	NVOC Regional Sewer Board	Niceville	Okaloosa	2	FLA010186	H1	0.650	0.397	Public access	Golf course irrigation	69
	NVOC Regional Sewer Board	Niceville	Okaloosa	2	FLA010187	Н	0.068		Public access	Other public access	5
	OCWS - Garniers WWTF	Ft. Walton Beach	Okaloosa	2	FLA010184	H1	6.500			Other crops	
	OCWS - Russel F. W. Stephenson WWTP	Mary Esther	Okaloosa	2	FLA010182	0.5	1.000				
_	Okaloosa Correctional Institution	Crestview	Okaloosa	2	1046M08287	basic	2.100		Ag. Irrigation	Other crops	240
	Okaloosa Correctional Institution	Crestview	Okaloosa	2	1046S35991	basic	0.225		GW recharge	Absorption fields	10
	Holley Navarre Water System Franchise Area	Navarre	Santa Rosa	2	FLA010211	HL	0.500		Public access	Golf course irrigation	93.6
	Navarre Beach Wastewater Reuse System	Navarre Beach	Santa Rosa	2	1017C10770	IM	0.932	0.162	Industrial	Treatment plant	N/A
	Stonebrook Golf Course	Pace	Santa Rosa	2	1057P07643	H1	0.450		Public access	Golf course irrigation	190
	Tiger Point Golf Course	Gulf Breeze	Santa Rosa	2	FLA010212001	H1	2.000		Public access	Golf course irrigation	225
25	Freeport WWTP	Freeport	Walton	2	1066M02902	basic	0.150			Rapid infiltration basins	
	Pt. Washington WWTP	Seagrove	Walton	2	FLA010252	basic	0.567	0.225	9	Rapid infiltration basins	
	Sandestin WWTF	Sandestin Beach Resort	Walton	2	1066P05959	H1	1.200		Public access	Golf course irrigation	482
	South Walton Utilities - Emerald Bay, Inc. ROW	Destin	Walton	2	1066P02421	H1	0.909		Public access	Golf course irrigation	117.24
-	South Walton Utilities - Emerald Shores	Destin	Walton	2	1066P02422	H1	0.060		Public access	Other public access	7.7
	South Walton Utilities - percolation ponds	Destin	Walton	2	1066P02423	H1	2.500		GW recharge	Absorption fields	19.768
	Walton Correctional Institution	0:: 5	Walton	2	FLA01025401	basic	0.175		GW recharge	Rapid infiltration basins	
-	Bay Point Golf Course	Panama City Beach	Bay	3	1003P00098	H1	0.500		Public access	Golf course irrigation	95
	Jackson Correctional Institution	Malone	Jackson	4	1032504181	0.8	0.220		Ag. Irrigation	Sod	27.5
	Sneads Irrigation Field	Sneads	Jackson	4	FLA010115		0.495	0.566	3	Other crops	20
	Washington Correctional Institution	Greenhead	Washington	4	FLA010260	basic	0.270	0.105		Absorption fields	3.3
	Carabelle WWTP	Carabelle	Franklin	5	FLA010064	basic	0.300	0.181		Other crops	30.06
	Eastpoint Water and Sewer	Eastpoint	Franklin	5	1019M19040	1	0.165	0.210	3	Other crops	23
	Lanark Village WWTP	Lanark Village	Franklin	5	1019M19050	basic	0.100	0.081		Other crops	18
	Gulf Correctional Institution	Wewahitchka	Gulf	5	FLA010105	basic	0.350	0.004	3 3	Other crops	36.8
	Jefferson Correctional Institution	Monticello	Jefferson	7	3133S02670		0.180		5	Other crops	1.9
	Tallahassee SE Farm Facility (Lake Bradford Rd WWTF		Leon	7	FLA010140	basic	4.500	3.210		Other crops	1995
	Tallahassee SE Farm Facility (Thomas P. Smith WWTF)		Leon	7	FLA010139	basic	27.500	13.650		included above	
	Talquin - Killearn Lakes WWTP	Tallahassee	Leon	7	FLA010173	basic	0.350	0.218		Other crops	120
44	Talquin - Lake Jackson WWTP	Tallahassee	Leon	7	FLA010171	basic	0.560	0.202	GW recharge	Rapid infiltration basins	6.16

Source: Florida Department of Environmental Protection Annual Reuse Reports, 1996



Golf Course Name	Golf Course Name				
Contact					
Phone			County		
NWFWMD Consumptive Use Per	mit Number_		_		
Existing Facilities					
1. Golf course location (street address)				
2. Year established	Prev	ious Name			
3. Total acreage	Acres irrigated	d	Number of holes		
4. Source of irrigation water					
☐ Ground	☐ Surface		☐ Purchased or provided		
# Wells	Source		Source		
☐ Floridan aquifer	☐ Natural		☐ Reuse		
☐ Sand and gravel aquifer	☐ Holding	g/recovery pond	☐ Public supply		
☐ Surficial	Is the surf	ace water augment	ed by wells		
☐ Unknown	☐ Yes	□ No			
5 . Is the irrigation system metered	☐ Yes	□No			
6. Source of potable (drinking) water	r				
☐ Ground	☐ Surface		☐ Purchased		
# Wells	Source		Source		
☐ Floridan aquifer					
☐ Sand and gravel aquifer					
☐ Surficial					
☐ Unknown					
7. Total design capacity of irrigation s	ystem				
8 . Is the irrigation system interconnec	ted with any o	other utility or facil	ity □ Yes □ No		
	Who				

Golf Course Name		Date	e	
Contact			e	
Phone			nty	
NWFWMD Consumptive Use Permit Number				
Existing Demand				
	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>Units</u>
9. Total annual metered water used, if available				
10. Total annual non-metered water used				
Method used to estimate non-metered water				
11. Total annual amount of water applied <pre>per acre in inches</pre>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>Units</u>
12. Estimated percent from each source				
A. Ground				
B. Surface				
C. Reuse				
D . Public Supply				
13. A. Peak month				
B . Amount used that month				
14. A. Peak day				
B . Amount used that day				

Golf Course Name						oate			
Contact						itle			
Phone						County			
NWFWMD Consumptive Us	e Permit Numb	er_			_				
Future Demand and Facilities									
YE	AR		<u>2000</u>	<u>2</u>	<u>010</u>	<u>20</u>	020		<u>Units</u>
15. Projected future annual dema	nd							_	
16. Projected average daily use								_	
17. Projected maximum day								_	
18 . Do you project changes in yo irrigated acreage (more or les								_	
19. Will you meet the demands for these years with your curr	ent	200	<u>)0</u>		<u>201</u>	10		<u>202</u>	<u>20</u>
Capa	city 🗀 🤇	Yes	□No		Yes	□No		☐ Yes	□ No
Source	ces 🗀 🦲	Yes	□ No		Yes	□ No		☐ Yes	□ No
20. If not, how will you meet futu	ıre demands (v	olur	ne and a	nticipate	d year	r)			
☐ Expanding water sources	□ Expanding	g fac	cilities	☐ Con	servat	ion	□ Re	euse	
Year	Year	_		Year _			Year		
Amount	Amount			Amour	nt		Amo	unt	
☐ Ground									
☐ Surface									
☐ Purchase									

Golf Course Name	Date
Contact	
Phone	County
NWFWMD Consumptive Use Permit Number	_
Water Conservation Efforts	
22. If in the event of extremely dry conditions, what would be the minimizing ation, that you would need	imum amount of water, or frequency of
23. If reclaimed wastewater was available to you over the next five ye source of irrigation water	ears, would you use it as your primary
☐ Yes ☐ No	
If no, why not	
Additional Information	
Please return to: Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301	
Thank you for your time and effort. If you have any questions pleat (904) 942-9500 ext. 3004	ease call Richard Marella
Prepared by	
Name	Title
Date	Mailed / Visited

Company Name			Date		
Contact			Title		
Phone		County			
NWFWMD Consumptive Use Po	ermit Number		DEP ID		
Existing Facilities					
1. Year established	Previou	ıs Name			
2. Source of water used for processi	ng or cooling purpos	ses			
☐ Ground	☐ Surface		☐ Purchased or	provided	
# Wells	Source		Source		
☐ Floridan aquifer			☐ Reuse		
☐ Sand and gravel aquifer			☐ Public supply		
☐ Surficial					
☐ Unknown					
3. Source of potable (drinking) wat	ter				
☐ Ground	☐ Surface		☐ Purchased or	provided	
# Wells	Source		Source		
☐ Floridan aquifer					
☐ Sand and gravel aquifer					
☐ Surficial					
☐ Unknown					
	199	4 1995	1996	Units	
4. Total system design capacity	177	<u> 1773</u>	1770	Omts	
A. Processing/Cooling					
B. Drinking/Domestic					

Company Name				Date				
Contact								
Phone				County				
NWFWMD Consumpti	ve Use Permit Numb	er						
Existing Demand								
		1994	<u>1995</u>	<u>1996</u>	<u>Units</u>			
5. A. Total amount of water	er used							
B . Domestic purposes								
C. Cooling purposes								
D . Processing purposes								
E. Other (specify)								
6. Amount of water withdra	wn							
7. Amount of water purchase	sed							
8. Maximum day	Volume							
	Date							
9. Minimum day	Volume							
	Date							
			<u>Date</u>	<u>Amount</u>	<u>Units</u>			
10 A. Maximum day on re-	cord since 1985							
Event or cause								
B . Maximum month on	record since 1985							
C. Maximum three mor	ath period on record	since 1985						
11. Is water recirculated for	other uses	Yes	□No					
If yes, approximately ho	ow much water is rec	circulated (amount or per	rcent)				

Company Name						
ContactPhone						
NWFWMD Consumptive Use		Number				
Future Demand and Facilities						
YE	AR	<u>2000</u>	<u>2010</u>	202	<u>0</u>	<u>Units</u>
2. Projected average daily use						
A. Domestic purposes						
B . Cooling purposes						
C. Processing purposes						
D . Other (specify)						
13. Projected maximum day						
4. Will you meet the demands for these years with your curr	ent	<u>2000</u>	<u>2</u>	<u>010</u>	2	2020
Capa	city	☐ Yes ☐ No	☐ Ye	s 🗆 No	□ Ye	es 🗆 No
Source	ces	☐ Yes ☐ No	☐ Ye	s 🗆 No	☐ Ye	es 🗆 No
5. If not, how will you meet futu	ıre deman	ds (volume and a	inticipated ye	ar)		
☐ Expanding water sources	□ Expa	anding facilities	☐ Conserv	ation	☐ Reuse	
Year	Year		Year	_	Year	
Amount	Amoun	t	Amount		Amount_	
☐ Ground						
☐ Surface						

Company Name	Date
Contact	Title
Phone	County
NWFWMD Consumptive Use Permit Number	
Water Conservation Efforts	
18. What water conservation programs or actions do yo	ou currently have or use
19. If reclaimed wastewater was available to you over to source of water for cooling or processing	the next five years would or could you use it as a
□ Yes □ No	
If no, why not	
Additional Information	
Please return to:	
Richard L. Marella	
USGS Water Resources Division	
227 N. Bronough Street, Suite 3015	
Tallahassee, FL 32301	
Thank you for your time and effort. If you have any at (904) 942-9500 ext. 3004	y questions please call Richard Marella
Prepared by	
Name	Title
Date	Mailed / Visited

Company Name			Date		
Contact					
Phone			County DEP ID		
NWFWMD Consumptive Use Po	ermit Number				
Existing Facilities					
1 . Year built	Prev	ious Name			
2. Source of water used for processi	ng or cooling purp	ooses			
☐ Ground	☐ Surface		☐ Purch	nased or provided	
# Wells	Source		Source_		
☐ Floridan aquifer			☐ Reus	e	
☐ Sand and gravel aquifer			☐ Publi	c supply	
☐ Surficial					
☐ Unknown					
3. Source of potable (drinking) wat	er				
☐ Ground	☐ Surface		☐ Purch	nased or provided	
# Wells	Source		Source_		
☐ Floridan aquifer					
☐ Sand and gravel aquifer					
☐ Surficial					
☐ Unknown					
	1	.994 19	995 19	996 Units	
4. Total system design capacity	<u>-</u>				
A. Processing/Cooling					
B. Drinking/Domestic					

Company Name				Date			
Contact				Title			
Phone		1		County			
NWFWMD Consumptive	Use Permit Ni	ımber		DEP ID			
Existing Demand							
		<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>Units</u>		
5. A. Total amount of water u	used						
B . Domestic purposes							
C. Cooling purposes							
D . Processing purposes							
E. Other (specify)							
6 . Amount of water withdraw	n						
7. Amount of water purchased	1						
8. Maximum day	Volume						
	Date						
9. Minimum day	Volume						
	Date						
			<u>Date</u>	<u>Amount</u>	<u>Units</u>		
10 A. Maximum day on recor	rd since 1985						
Event or cause							
B. Maximum month on re-	cord since 198	5		_			
C. Maximum three month	period on reco	ord since 1985		_			
11. Is water recirculated for ot	her uses	☐ Yes	□ No				
If yes, approximately how	much water is	recirculated (amount or pe	rcent)			

Company Name						
ContactPhone						
NWFWMD Consumptive Use	lumber					
Future Demand and Facilities						
YE	AR	2000	<u>2010</u>	2020	0	<u>Units</u>
2. Projected average daily use						
A. Domestic purposes						
B . Cooling purposes						
C. Processing purposes						
D . Other (specify)						
13. Projected maximum day						
4. Will you meet the demands for these years with your current		<u>2000</u>	<u>20</u>	<u>010</u>		<u>2020</u>
Capa	city	☐ Yes ☐ No	☐ Ye	s 🗆 No		es 🗆 No
Source	ces	☐ Yes ☐ No	☐ Ye	s 🗆 No	□ Y	es 🗆 No
5. If not, how will you meet futu	ıre deman	ds (volume and a	inticipated ye	ar)		
☐ Expanding water sources	□ Expa	nding facilities	☐ Conserv	ation	☐ Reuse	
Year	Year		Year	_	Year	
Amount	Amoun	t	Amount		Amount_	
☐ Ground						
☐ Surface						

Contact	Company Name	Date
NWFWMD Consumptive Use Permit Number	Contact	Title
Water Conservation Efforts 18. What water conservation programs or actions do you currently have or use 19. If reclaimed wastewater was available to you over the next five years would or could you use it as a source of water for cooling or processing Yes		
19. If reclaimed wastewater was available to you over the next five years would or could you use it as a source of water for cooling or processing Yes	NWFWMD Consumptive Use Permit Number	DEP ID
19. If reclaimed wastewater was available to you over the next five years would or could you use it as a source of water for cooling or processing Yes	Water Conservation Efforts	
source of water for cooling or processing Yes	18. What water conservation programs or actions do you c	urrently have or use
If no, why not Additional Information Please return to: Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name	•	next five years would or could you use it as a
Additional Information Please return to: Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name	□ Yes □ No	
Please return to: Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name	If no, why not	
Please return to: Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name		
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Please return to: Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name		
Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name Title	Additional Information	
Richard L. Marella USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name Title	Please return to:	
USGS Water Resources Division 227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name Title	Trease return to.	
227 N. Bronough Street, Suite 3015 Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name Title		
Tallahassee, FL 32301 Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name Title		
Thank you for your time and effort. If you have any questions please call Richard Marella at (904) 942-9500 ext. 3004 Prepared by Name Title		
at (904) 942-9500 ext. 3004 Prepared by Name Title	Talianassee, TE 32301	
Prepared by Name Title		uestions please call Richard Marella
Name Title	at (504) 542 5500 CAU 5004	
	Prepared by	
Date Mailed / Visited	Name	Title
	Date	Mailed / Visited

	Utility Name			I	Date	
	Contact					
	Phone		County			
	NWFWMD Consumptive Use Perm	nit Number		I	DEP ID	
Ex	xisting Facilities					
1.	Source of water					
	☐ Ground	☐ Surface			☐ Purchased	
	# Wells	Source		-	Source	
	☐ Floridan aquifer					
	☐ Sand and gravel aquifer					
	☐ Surficial					
	☐ Unknown					
		19	<u>994</u>	<u>1995</u>	<u>1996</u>	<u>Units</u>
2.	Total system design capacity					
3.	Is the system interconnected with an	other utility o	r facility?	☐ Yes	□No	
	Who		Size (Line diamet	er)	
E	xisting Demand					
		<u>19</u>	<u>994</u>	<u>1995</u>	<u>1996</u>	<u>Units</u>
4.	A. Raw water produced (withdrawn	n)				
	B . Water purchased (raw or treated)					
	C Water cold wholesale (row or tre	estad)				
	C. Water sold wholesale (raw or tre	<u> </u>				
	D . Total water to distribution system	n				

Utility Name				_ Date		
Contact				Title County		
	Phone					
NWFWMD Consumptive Use Permit Number				DEP ID		
Existing Demand (Contin	nued)					
		<u>1994</u>	<u>1995</u>	<u>1996</u>	Month	
5. Estimated Population se	erved					
6 . Total number of service	connections					
A. Residential						
B . Commercial						
C. Industrial						
D . Other (specify)				- <u></u>		
E. Unmetered connect	ions					
		<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>Units</u>	
7. Amount of water billed	for					
8. Amount of water lost/un	naccounted for					
9. Maximum day	Volume					
	Date					
10. Minimum day	Volume					
	Date					
			<u>Date</u>	Amount	<u>Units</u>	
11. A. Maximum day on r	ecord since 1985					
Event or cause_						
B . Maximum month o	n record since 1985	5		<u> </u>		
C. Maximum three mo	onth period on reco	rd since 1985				

Utility Name	Date					
Contact						
Phone				County		
NWFWMD Consumptive Use	e Perm	it Number		DEP ID_		
Future Demand and Facilities						
		2000	2010	202	20	<u>Units</u>
12. Projected population served						
13. Projected service connections						
14. Projected average daily use						
15. Projected maximum day						
16. Projected capacity						
17. Will you meet the demands for these years with your curre	ent	2000	201	<u>10</u>	2020	<u>)</u>
Capa	city	☐ Yes ☐ No	☐ Yes	□No	☐ Yes □	□No
Source	ces	☐ Yes ☐ No	☐ Yes	□No	☐ Yes □	□No
18. If not, how will you meet futu	ıre dem	nands (anticipated ye	ear and amou	ınt)		
☐ Expanding water sources		xpanding facilities	☐ Conserv	ation	☐ Reuse	
Year	Year		Year		Year	
Amount	Amo	ount	Amount		Amount	
☐ Ground						
☐ Surface						
☐ Purchase						

Utility	Name			Date	
Phone_				County	
NWFW	VMD Consu	amptive Use Permit	Number	DEP ID	
Water Co	nservation	Efforts			
19. Please	indicate wh	nich water conservat	ion programs are curre	ently in place or planned	
Current	Planned	Effective Date (o	r anticipated date)		
			Restrictions on lan	dscape irrigation	
			Building codes wh	ich require low-volume plumbing	fixtures
			Xeriscape landscap	pe ordinances	
			Leak detection pro	grams	
			Water conservation	public education programs	
			Water shortage pla	n or guidelines in the event of dry	conditions
			Reuse efforts		
			Other (explain)		
Additiona	l Informati	ion			
Please atta	ach a copy	of the following in	formation:		
1. <u>Ra</u>	ite Structure	e or current rates for	water customers		
2. <u>M</u> o	ost recent m	nap of your potable	water service area		
Please retu	ırn to:				
227 N. Bro	ter Resource	et, Suite 3015			
-	-	time and effort. If 00 ext. 3004	you have any questic	ons please call Richard Marella	
Prepared by					
Name				Title	

Date

Mailed / Visited

Questionnaire

Utility/Owner/Plant	Plant/Facility	Contacted	Replied	County	Region	ASC
Arizona Chemicals	Bay County Plant	Visit	Yes	Bay	III	4
Stone Container		Mail	Yes	Bay	IV	
Champion International Paper		Visit	Yes	Escambia	I	
Monsanto Chemicals		Visit	Yes	Escambia	I	
U.S. Navy	Pensacola NAS	Mail	Yes	Escambia	I	
Quincy Corp. Inc. (Quincy Farms)		Visit	Yes	Gadsden	VI	
Arizona Chemicals	Port St. Joe Plant	Visit	Yes	Gulf	V	2
Florida Coast Paper Co., LLC		Visit	Yes	Gulf	V	2
U.S. Air Force	Eglin Air Force Base	Visit	Yes	Okaloosa	II	1
U.S. Air Force	Hurlburt Field	Visit	Yes	Okaloosa	II	1
Air Products Incorporated		Visit	Yes	Santa Rosa	II	
Sterling Fibers, Inc.		Visit	Yes	Santa Rosa	II	
Primex Technologies	St. Marks Plant	Visit	Yes	Wakulla	VII	
Perdue Farms		Visit	Yes	Walton	II	1

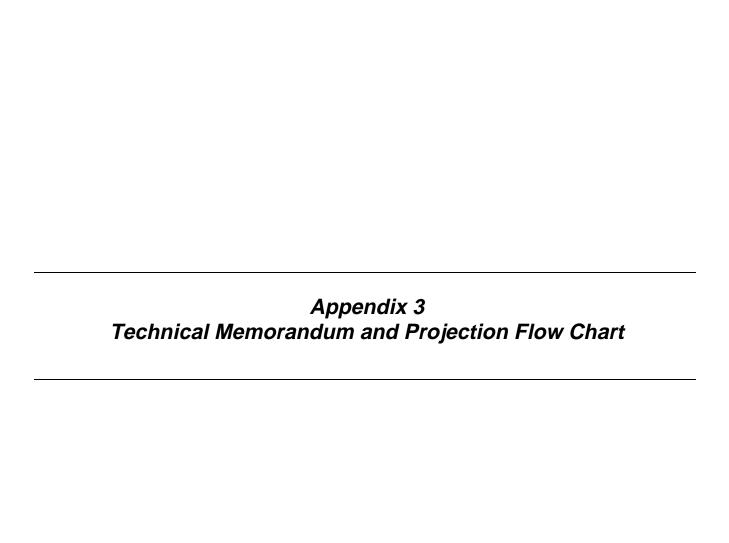
Questionnaire

		Question	IIIaiie			
Name/Owner	Facility	Contacted	Replied	County	Region	ASC
Bay Point Yacht and Country Club	1	Mail		Bay	III	4
Club at Sandy Creek, The		Mail	Yes	Bay	III	
Edgewater Beach Resort Golf Course		Mail		Bay	III	4
Holiday Golf and Racquet Club		Mail		Bay	III	4
Hombre Golf Club (Edgewater Estates)		Mail		Bay	III	+
, ,	0'' 0 1			,		-
Majette Dunes Golf and Country Club	City Sports	Mail		Bay	III	
Panama City Country Club		Mail		Bay	III	
Signal Hill Golf Course		Mail		Bay	III	
U.S. Air Force	Tyndall/Pelican Point GC			Bay	III	
A. C. Read Golf Club		Mail	Yes	Escambia	I	
Champions Golf Club		Mail		Escambia	I	
Creekside Golf Club		Mail		Escambia	I	
Green Medows Golf Course		Mail		Escambia	I	1
Marcus Pointe Golf Course		Mail		Escambia	I	1
		-	Vaa			+
Monsanto Employees Golf Association		Mail	Yes	Escambia	I	
Pensacola Country Club		Mail	Yes	Escambia	I	
Pensacola, City of	Osceola Municipal Golf Course	Mail		Escambia	I	
Perdido Bay Resort		Mail		Escambia	I	
Scenic Hills Country Club		Mail		Escambia	I	
U.S. Navy	Saufley Golf Course	Mail		Escambia	I	
Golf Club of Quincy		Mail		Gadsden	VI	
Seminole Valley Golf Course		Mail	Yes	Gadsden	VI	
Saint Josephs Bay Country Club		Mail	103	Gulf	V	2
Bonifay Country Club		Mail		Holmes	IV	
Florida Caverns Golf Course		Phone		Jackson	IV	
Great Oaks Golf Course		Mail		Jackson	IV	
Magnolia Oaks Golf Course		Mail	Yes	Jackson	IV	
Jefferson Country Club		Mail	Yes	Jefferson	VII	
Capital City Country Club		Mail	Yes	Leon	VII	
Golden Eagle Country Club		Mail	Yes	Leon	VII	1
Hilaman Park Golf Club		Mail	100	Leon	VII	
Killearn Golf and Contry Club		Mail	Yes	Leon	VII	-
·		Mail	162		VII	
Seminole Golf Course				Leon		
Summerbrooke Golf and Country Club		Mail	Yes	Leon	VII	
Emerald Bay Plantation		Mail	Yes	Oka/Walton	II	1
Garden of Destin, The		Mail		Oka/Walton	II	1
Indian Bayou Golf and Country Club		Mail		Oka/Walton	II	1
Sandpiper Cove Golf Course		Mail		Oka/Walton	II	1
Seascape Resort, Incorporated.		Visit		Oka/Walton	II	1
Bluewater Bay Country Club		Visit	Yes	Okaloosa	II	1
Fort Walton Beach, City of	Municipal Golf Course	Mail	100	Okaloosa	II	1
Foxwood Country Club	Ividilicipal Golf Codise			1		
		Mail	V	Okaloosa	II	
Island Golf Center		Mail	Yes	Okaloosa	II	1
Regatta Bay		Mail	Yes	Okaloosa	II	2
Rocky Bayou Country Club		Mail		Okaloosa	II	1
Shalimar Pointe Golf and Country Club		Mail		Okaloosa	II	1
Shoal River Golf Course		Mail	Yes	Okaloosa	II	<u> </u>
U.S. Air Force	Eglin AFB Golf Course	Visit	1	Okaloosa	II	1
Club at Hidden Creek, The		Mail		Santa Rosa	II	1
Gator Lakes Golf Course		Mail	İ	Santa Rosa	II	1
Stonebrook Village Golf Course	<u> </u>	Mail	1	Santa Rosa	II	
Tanglewood Golf and Country Club	+	Mail	1	Santa Rosa	II	+
,	+		1			+
Tiger Point Golf and Country Club	140.00	Mail		Santa Rosa	II	1
U.S. Navy	Whiting Field Golf Course	Mail	Yes	Santa Rosa	II	—
Village Golf Center	Stonebridge Golf Course	Mail		Santa Rosa	II	1
Wildwood Golf Course		Mail	Yes	Wakulla	VII	<u> </u>
D.I. Developers, Inc.		Mail		Walton	II	1
Sandestin Resort Golf Course		Visit		Walton	II	1
Santa Rosa Golf and Beach Club		Visit	Yes	Walton	II	1
Falling Waters Country Club	+	Mail	Yes	Washington	IV	
	+		169		IV	+
Sunny Hills Golf and Country Club		Mail	i	Washington	1 /	

	Questionnaire						
Utility/Owner/Plant	Plant/Facility	Contacted	Replied	County	Region	ASC	
Gulf Power Company	Smith	Visit	Yes	Bay	III		
Gulf Power Company	Crist	Visit	Yes	Escambia	I		
Gulf Power Company	Scholtz	Visit	Yes	Jackson	IV		
Timber Energy		Visit	Yes	Liberty	IV		
City of Tallahassee	Hopkins	Visit	Yes	Leon	VII		
City of Tallahassee	Purdom	Visit	Yes	Wakulla	VII		

Questionnaire

Utility/Owner	Plant/Facility	Contacted	Replied	County	Region	ASC
Bay County Water System	1	Visit	Yes	Bay	III	7.00
Bayside Park		Mail		Bay	III	2
Callaway, City of		Mail		Bay	III	
Cedar Grove Water System		Mail		Bay	III	
Lynn Haven, City of		Mail	Yes	Bay	III	
Mexico Beach, City of		Visit	Yes	Bay	III	2
Panama City Beach, City of		Visit	Yes	Bay	III	4
Panama City, City of		Mail	Phone	Bay	III	
Parker, City of		Mail	Yes	Bay	III	
Springfield, City of		Mail	Yes	Bay	III	
U.S. Air Force	Tyndall Air Force Base	Mail	Yes	Bay	III	
Escambia County Utilities		Visit	Yes	Escambia	I	
Molino Utilities		Mail	Yes	Escambia	I	
Peoples Water Service Company		Mail		Escambia	I	
Alligator Point Water District		Visit	Yes	Franklin	V	3
Apalachicola, City of		Visit	Yes	Franklin	V	3
Carrabelle, City of		Visit	Yes	Franklin	V	3
Eastpoint Water and Sewer		Visit	Yes	Franklin	V	3
Lanark Village Water and Sewer		Visit	Yes	Franklin	V	3
St. George Island Utility Company		Visit	Yes	Franklin	V	3
Chattahoochee, City of		Mail		Gadsden	VI	
Florida Department of Corrections	Chattahoochee State Hospital	Mail	Yes	Gadsden	VI	
Greensboro, Town of	·	Visit	Yes	Gadsden	VI	5
Gretna, Town of		Visit	Yes	Gadsden	VI	5
Havana, Town of		Mail	Yes	Gadsden	VI	
Quincy, City of		Visit		Gadsden	VI	5
Talquin Electric Cooperative	Gadsden Regional	Visit	Yes	Gadsden	VI	5
Lighthouse Utilities Company	Ţ.	Visit	Yes	Gulf	V	2
Port St. Joe, City of		Visit	Yes	Gulf	V	2
Bonifay, City of		Mail		Holmes	IV	
Florida Department of Corrections	Apalachee Correctional Facility	Mail		Holmes	IV	
Graceville, City of	,	Mail	Yes	Jackson	IV	
Marianna, City of		Mail		Jackson	IV	
Monticello, City of		Mail		Jefferson	VII	
Tallahassee, City of		Visit	Yes	Leon	VII	
Talquin Electric Cooperative	Bradfordville Regional	Visit	Yes	Leon	VII	
Talquin Electric Cooperative	Lake Jackson Regional	Visit	Yes	Leon	VII	
Talquin Electric Cooperative	Meadows at Wood Run	Visit	Yes	Leon	VII	
Talquin Electric Cooperative	Pineridge Estates	Visit	Yes	Leon	VII	
Auburn Water System		Mail		Okaloosa	II	
Crestview, City of		Mail		Okaloosa	II	
Destin Water Users Inc.		Visit	Yes	Okaloosa	II	1
Fort Walton Beach, City of		Visit	Yes	Okaloosa	П	1
Mary Esther, City of		Visit	Yes	Okaloosa	II	1
Niceville, City of		Visit	Yes	Okaloosa	П	1
Okaloosa County Water and Sewer		Visit	Yes	Okaloosa	II	1
Valparaiso, city of		Visit	Yes	Okaloosa	II	1
East Milton Water System		Mail		Santa Rosa	II	
Holly/Navarre Water System		Visit	Yes	Santa Rosa	II	1
Midway Water System		Visit	Yes	Santa Rosa	П	1
Milton, City of		Mail	Yes	Santa Rosa	П	
Moore Creek-Mt. Carmel Utilities		Mail		Santa Rosa	П	
Navarre Beach Utility System		Visit	Yes	Santa Rosa	П	1
Pace Water System		Mail		Santa Rosa	II	
Point Baker Water System		Mail	Yes	Santa Rosa	II	
Gulf Coast		Mail	Yes	Wakulla	VII	
Sopchoppy, Town of		Mail	Yes	Wakulla	VII	
DeFuniak Springs, City of		Mail		Walton	II	
Florida Community Services Corpora	tion	Visit	Yes	Walton	II	1
Freeport, City of		Visit	. 55	Walton	II	1
South Walton Utility Company		Visit	Yes	Walton	II	1
Chipley, City of		Mail		Washington	IV	
-	I.				- •	



June 29, 1998

TO: Douglas Barr, Executive Director

Northwest Florida Water Management District

FROM: Richard L. Marella, Geographer

Tallahassee, Florida

SUBJECT: Technical Memorandum: Methodology for water use projections

The methodologies discussed below will be used to project future water use in the Northwest Florida Water Management District (NWFWMD) for the years 2000, 2005, 2010, and 2020.

Population Projections: The future population for each county will be estimated by projecting the population based on historical aggregate population trends or changes. These projections will be made by fitting a curve to the historical data from the Census and the University of Florida, Bureau of Economic and Business Research (BEBR), and extrapolating it into the future in five year increments (Figure 1). One of six different curves will be fit to the historical data (Linear, Geometric, Parabolic, Modified Exponential, Gompertz, and Logistic). The appropriate curve will be selected based on statistical analysis and past trends, and the resulting projection will be compared against those published by BEBR, in the county comprehensive plans, and other sources (utility or other studies).

Public Supply: Projections for public supply water use will be made by using historical water-use values for a six (1990-96), nine (1988-96), or twelve (1985-96) year period between 1985 and 1996 (based on data reported by DEP, NWFWMD, and the individual utilities). These projections will be made by fitting a curve to the historical data and extrapolating it into the future in five year increments (Figure 2). Six different curves will be fit to the historical data (Linear, Geometric, Parabolic, Modified Exponential, Gompertz, and Logistic). The appropriate curve will be selected based on statistical analysis and past trends, and the resulting projections will be compared against the water use projections provided by the utility. Projections will be made for all utilities greater than 0.01 Mgal/d within each county and Area of Special Concern (ASC). Assumptions

will include a growth trend for each utility that is comparable to past trends (unless build out or expansion is noted through contact with the utility, comprehensive plans, or other sources). Estimates of population served by each utility will be examined by reviewing Census tract populations for 1995 and overlaying the service areas of the individual utilities as well as examining the Affordable Housing Needs Assessment population data calculated by the Schimburg Center. Population data sources will be prioritized in order of validity.

Projected water use values for each utility will be compared to an estimated per capita water use for each utility. The population served for each utility will be projected by taking the estimated population served for the years 1970, 1975, 1980, 1985, 1990, and 1995 by utility and selecting one of the six different curves to project the population served for the years 2000, 2005, 2010, 2015 and 2020 (Figure 3). The population served for these years will then be divided into the projected water use to calculate a utility per capita. If the per capita is appropriate for a particular utility based on historical data and trends, then the water-use projection will be acceptable. If it is not, the utility's projected water use calculations and historical population estimates will be re-examined. Historical population served will be supplied by a number of sources including; USGS data base (from the five year assessment), service connections multiplied by people per household, DEP sanitary surveys, BEBR, CUP, and others.

Peak day, 30-day peak (monthly), and 90-day peak (seasonal) values will be projected using a calculated ratio between the annual daily average water use and the actual peak value per utility for each (peak day, 30-day peak, and 90-day peak) and multiplying it by the projected annual daily average. The peak day, 30-day peak, and 90-day peak will be obtained from historical records from the utilities contacted through the public supply questionnaire, and for the smaller utilities the county average will be applied. The value used as the ratio for each (peak day, 30-day peak, and 90-day peak) will be the actual peak on record since 1985 divided by that year's annual daily average use. For the county totals, the peaks for each utility will be added to determine the total peak usage, regardless if they fell on different years or days. Using the ratio between the annual daily average and the 30-day peak and the 90 day-peak will accommodate for seasonality as these values will reflect the increase in the use of public supply water caused by lawn watering and visitors. Due to the fact that the water demand increase caused by lawn watering and visitors occur during the same time of the year (May through September), it would be difficult to differentiate the demand for each out of the total. Assumptions include that the ratio between the annual average daily use and peak day, 30-day peak, and 90-day peak will remain the same and that all peak events will occur at approximately the same time of year. To verify these values, the trend in ratios will be examined and anomalies will be detailed and will not be used if not valid.

Domestic Self-supplied and small unaccounted for Public Supply Systems: Projections for domestic self-supplied and small unaccounted for public supply systems water use will be made using the percent of the county on public supply and assume the residual population to be self-supplied or served by small public supply systems that are below the 0.01 Mgal/d (systems not accounted for under public supply). The percent of population served by public supply for the past twenty-five years will be examined from data collected from the USGS five year assessment to estimate the future trend. Once the trend in percent of the population served per county is established, the total water use for the county and the self-supplied demands will be calculated. Data on the number of households with individual water systems will be verified against Census data for 1990 and will be checked against the Census tract data for the areas served by public supply. It is assumed that the self-supplied and small public supply population will remain at or near a constant percentage of a county's population, and that those using self-supplied systems or served by a small public supply system use water at a similar rate as those on public supply in each county.

Self-supplied Commercial-Industrial: Projections for the eleven major self-supplied commercial-industrial facilities will be made based upon information provided from the users directly. This will include the annual daily average water use. Peak day, 30-day peak (monthly), and 90-day peak (seasonal) values will be projected using a calculated ratio between the actual peak value per facility for each (peak day, 30-day peak, and 90-day peak) and then multiplying it by the projected annual daily average. Values for the remaining users in this category will be projected using trends from the previous ten years. It is assumed that all industrial users will remain at a constant production level (unless otherwise noted by the users), no major economic changes will occur, and information provided by the users will remain valid.

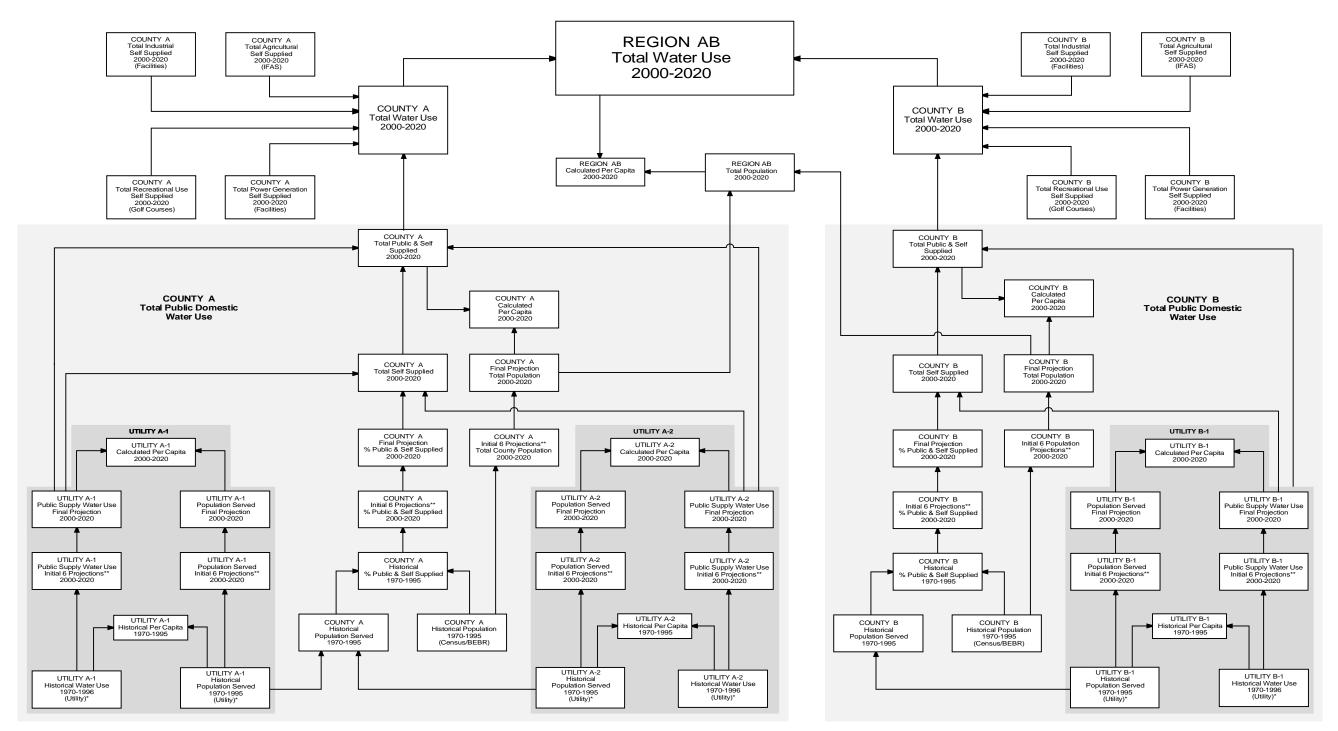
Recreational Irrigation: Projections for golf course irrigation will be made by applying a fixed application rate per acre based on geographic location to each golf course and multiplied by the number of acres irrigated. The application rate will be determined using one of two permitted rates (coastal or inland) and will be checked against information obtained from the golf course survey returns. Users will be identified by area, as those along the coast will use 38 inches per acre and those inland will use 24 inches per acre. Information from the survey returns will also aid in determining water sources and potential reuse users. Assumptions will include that existing facilities will use water at a constant rate over this time period, and that no changes will occur unless noted through the survey. Predictions of additional facilities being planned or built, as well as the expansion or change of water source of existing facilities, will be made through contact with the users, consultation with county comprehensive plans, and contacting Department of Community Affairs.

Where detailed information is not available, a county ratio of people per hole and water use per

hole will be applied to project water use. The people per hole ratio will be calculated by dividing a county's total population by the total number of golf course holes in that county in 1995. This ratio will then be applied to the projected county population to determine the projected number of golf course holes per county. There will be a nine hole threshold, in which water use will not be calculated unless the people per hole ratio reaches nine, or increments of nine. The projected number of holes will then be multiplied by a water use coefficient per hole, which is calculated by dividing the total golf course application for 1995 for a county (according to the above method using permitted rates) by the total number of golf course holes in the county. This county ratio of water use per hole will then be applied to calculate the county's total projected recreational water use for 2000 - 2020.

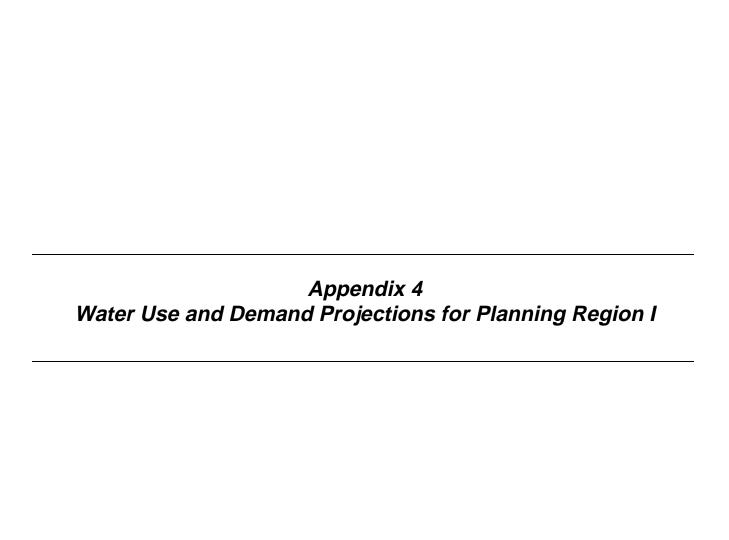
Power Generation: Projections for the five power plants will be made based on information provided by Gulf Power Company and the City of Tallahassee. Additional information and projections will be made for Timber Energy Resources in Liberty County. It is assumed that all facilities will remain at a constant production level (unless otherwise noted by the power company) and that facility expansion or closure will be noted by the power company or companies. If expansion is planned, then water projections will be provided by the power company.

Projection Flow Chart: Regional Water Use 2000-2020



^{*}Utility information originated as reported by utility through Florida Department of Environmental Protection, Northwest Florida Water Management District, or directly from utility

^{**}Initial 6 projections are the Linear, Geometric, Parabolic, Modified Exponential, Gompertz, and Logistic models



Appendix 4. Planning Region I a. System Inventory

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Bratt-Davisville W/S	-	Escambia		PS	0.20	Sand-gravel aquifer	100		
Central Water Works		Escambia		PS	0.26	Sand-gravel aquifer	100		
Century Utilities		Escambia		PS	0.51	Sand-gravel aquifer	100		
Cottage Hill Utilities		Escambia		PS	0.33	Sand-gravel aquifer	100		
Escambia County Utilities		Escambia		PS	32.11	Sand-gravel aquifer	100		
Farm Hill Utilities		Escambia		PS	0.29	Sand-gravel aquifer	100		
Gonzalez Utilities		Escambia		PS	0.39	Sand-gravel aquifer	100		
Molino Utilities		Escambia		PS	0.58	Sand-gravel aquifer	100		
Peoples Water System		Escambia		PS	2.08	Sand-gravel aquifer	100		
Walnut Hill Water Works		Escambia		PS	0.19	Sand-gravel aquifer	100		
South Santa Rosa Island Auth.	Pensacola Beach	Escambia		SPS	N/A	Escambia County	100		
Champion International		Escambia		C-I	26.86	Sand-gravel aquifer	100		
Monsanto Incorporated		Escambia		C-I	31.95	Surface	69	Sand-gravel aquifer	31
Pensacola NAS		Escambia		C-I	2.75	Escambia County	100		
Reichold Chemicals		Escambia		C-I	0.43	Sand-gravel aquifer	100		
University of West Florida		Escambia		C-I	0.35	Sand-gravel aquifer	100		
A. C. Read Golf Club		Escambia		R-I	0.33	N/A	N/A		
Champions GC		Escambia		R-I	0.07	N/A	N/A		
Creekside GC		Escambia		R-I	0.13	N/A	N/A		
Green Meadows GC		Escambia		R-I	0.07	N/A	N/A		
Marcus Pointe GC		Escambia		R-I	0.13	N/A	N/A		
Monsanto GC		Escambia		R-I	0.13	N/A	N/A		
Osceola/City Municiple GC		Escambia		R-I	0.13	N/A	N/A		
Pensacola CC		Escambia		R-I	0.13	N/A	N/A		
Perdido Bay Resort		Escambia		R-I	0.13	N/A	N/A		
Saufley GC		Escambia		R-I	0.07	N/A	N/A		
Senic Hills GC		Escambia		R-I	0.13	N/A	N/A		
Gulf Power	Crist Plant	Escambia		PWR	164.10	Escambia River	N/A	Sand-gravel aquifer	N/A

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 4.

Planning Region I

b. Projection summary tables

The following projections were prepared by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the Northwest Florida Water Management District. These projections are for planning purposes only.

Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; Northwest Florida Water Management District; Bureau of Economic and Business Research; and individual utilities.

Footnotes and Specific Utility Projection Information: Escambia County

- Escambia County Utility Authority: Projected information does not include water sold to the City of Gulf Breeze in Santa Rosa County.

Planning Region I Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,482.70	36.94	72.69	53.64	46.81	150	246,878	87.3%	
Domestic S.S. & Small Public S.S.	1,958.63	5.37				150	35,864	12.7%	
Commercial-Industrial Self-supplied	22,751.20	62.33	N/A	N/A	N/A				
Recreational Irrigation	659.84	1.81							810
Power Generation	59,896.87	164.10	270.10	265.84	264.69				
Agricultural	51.10	0.14	N/A	N/A	N/A				N/A

Total 98,800.34 270.69 282,742 810

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,907.98	38.10	74.99	55.33	48.29	139	273,287	91.0%	
Domestic S.S & Small Public S.S.	1,378.39	3.78				139	27,085	9.0%	
Commercial-Industrial Self-supplied	24,008.53	65.78	N/A	N/A	N/A				
Recreational Irrigation	692.83	1.90							851
Power Generation	61,122.91	167.46	275.63	271.29	270.11				
Agricultural	133.59	0.37	N/A	1.21	0.94				495

Total 101,244.24 277.38 300,372 1,346

2005 Water Use Projection

2000 Trator Coo Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	14,668.52	40.19	79.15	58.31	50.90	138	292,060	92.3%	
Domestic S.S & Small Public S.S.	1,226.04	3.36				138	24,411	7.7%	
Commercial-Industrial Self-supplied	24,746.97	67.80	N/A	N/A	N/A				
Recreational Irrigation	725.83	1.99							891
Power Generation	61,677.71	168.98	278.13	273.75	272.56				
Agricultural	134.69	0.37	N/A	1.20	0.94				484

Total 103,179.75 282.68 316,471 1,375

Planning Region I Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	15,502.72	42.47	83.71	61.54	53.76	136	311,195	93.6%	
Domestic S.S & Small Public S.S.	1,064.86	2.92				136	21,375	6.4%	
Commercial-Industrial Self-supplied	25,509.41	69.89	N/A	N/A	N/A				
Recreational Irrigation	791.81	2.17							972
Power Generation	62,232.51	170.50	280.63	276.21	275.02				
Agricultural	140.89	0.39	N/A	1.23	0.97				490
Total	105,242.20	288.33					332,570		1,462

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	16,411.55	44.96	88.65	65.05	56.85	136	330,788	94.9%	
Domestic S.S & Small Public S.S.	887.16	2.43				136	17,881	5.1%	
Commercial-Industrial Self-supplied	26,296.63	72.05	N/A	N/A	N/A				
Recreational Irrigation	824.80	2.26							1,013
Power Generation	62,783.66	172.01	283.12	278.66	277.45				
Agricultural	149.65	0.41	N/A	1.30	1.02				517
Total	107,353.45	294.12					348,669		1,530

2020 Water Use Projection

ZOZO Water Coo i rejection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	17,396.16	47.66	93.99	68.83	60.20	136	350,965	96.2%	
Domestic S.S & Small Public S.S.	684.15	1.87				136	13,803	3.8%	
Commercial-Industrial Self-supplied	27,109.43	74.27	N/A	N/A	N/A				
Recreational Irrigation	857.79	2.35							1,053
Power Generation	63,334.81	173.52	285.60	281.10	279.89				
Agricultural	168.27	0.46	N/A	1.47	1.16				592
Total	109,550.61	300.14					364,768	·	1,645

Planning Region I Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	36.94	38.10	40.19	42.47	44.96	47.66
Domestic S.S & Small Public S.S.	5.37	3.78	3.36	2.92	2.43	1.87
Commercial-Industrial Self-supplied	62.33	65.78	67.80	69.89	72.05	74.27
Recreational Irrigation	1.81	1.90	1.99	2.17	2.26	2.35
Power Generation	164.10	167.46	168.98	170.50	172.01	173.52
Agricultural	0.14	0.37	0.37	0.39	0.41	0.46

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	72.69	74.99	79.15	83.71	88.65	93.99
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	270.10	275.63	278.13	280.63	283.12	285.60
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	53.64	55.33	58.31	61.54	65.05	68.83
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	265.84	271.29	273.75	276.21	278.66	281.10
Agricultural	N/A	1.21	1.20	1.23	1.30	1.47

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	46.81	48.29	50.90	53.76	56.85	60.20
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.43	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	264.69	270.11	272.56	275.02	277.45	279.89
Agricultural	N/A	0.94	0.94	0.97	1.02	1.16

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1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,482.70	36.94	72.69	53.64	46.81	150	246,878	87.3%	
Domestic S.S. & Small Public S.S.	1,958.63	5.37				150	35,864	12.7%	
Commercial-Industrial Self-supplied	22,751.20	62.33	N/A	N/A	N/A				
Recreational Irrigation	659.84	1.81							810
Power Generation	59,896.87	164.10	270.10	265.84	264.69				
Agricultural	51.10	0.14	N/A	N/A	N/A				N/A

Total 98,800.34 270.69 282,742 810

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,907.98	38.10	74.99	55.33	48.29	139	273,287	91.0%	
Domestic S.S & Small Public S.S.	1,378.39	3.78				139	27,085	9.0%	
Commercial-Industrial Self-supplied	24,008.53	65.78	N/A	N/A	N/A				
Recreational Irrigation	692.83	1.90							851
Power Generation	61,122.91	167.46	275.63	271.29	270.11				
Agricultural	133.59	0.37	N/A	1.21	0.94				495

Total 101,244.24 277.38 300,372 1,346

316,471

2005 Water Use Projection

Total

103,179.75

282.68

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	14,668.52	40.19	79.15	58.31	50.90	138	292,060	92.3%	
Domestic S.S & Small Public S.S.	1,226.04	3.36				138	24,411	7.7%	
Commercial-Industrial Self-supplied	24,746.97	67.80	N/A	N/A	N/A				
Recreational Irrigation	725.83	1.99							891
Power Generation	61,677.71	168.98	278.13	273.75	272.56				
Agricultural	134.69	0.37	N/A	1.20	0.94				484

1,375

Escambia County Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	15,502.72	42.47	83.71	61.54	53.76	136	311,195	93.6%	
Domestic S.S & Small Public S.S.	1,064.86	2.92				136	21,375	6.4%	
Commercial-Industrial Self-supplied	25,509.41	69.89	N/A	N/A	N/A				
Recreational Irrigation	791.81	2.17							972
Power Generation	62,232.51	170.50	280.63	276.21	275.02				
Agricultural	140.89	0.39	N/A	1.23	0.97				490
Total	105,242.20	288.33					332,570		1,462

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	16,411.55	44.96	88.65	65.05	56.85	136	330,788	94.9%	
Domestic S.S & Small Public S.S.	887.16	2.43				136	17,881	5.1%	
Commercial-Industrial Self-supplied	26,296.63	72.05	N/A	N/A	N/A				
Recreational Irrigation	824.80	2.26							1,013
Power Generation	62,783.66	172.01	283.12	278.66	277.45				
Agricultural	149.65	0.41	N/A	1.30	1.02				517
Total	107,353.45	294.12					348,669		1,530

2020 Water Use Projection

2020 Water Ose Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	17,396.16	47.66	93.99	68.83	60.20	136	350,965	96.2%	
Domestic S.S & Small Public S.S.	684.15	1.87				136	13,803	3.8%	
Commercial-Industrial Self-supplied	27,109.43	74.27	N/A	N/A	N/A				
Recreational Irrigation	857.79	2.35							1,053
Power Generation	63,334.81	173.52	285.60	281.10	279.89				
Agricultural	168.27	0.46	N/A	1.47	1.16				592
Total	109,550.61	300.14					364,768		1,645

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Escambia County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	36.94	38.10	40.19	42.47	44.96	47.66
Domestic S.S & Small Public S.S.	5.37	3.78	3.36	2.92	2.43	1.87
Commercial-Industrial Self-supplied	62.33	65.78	67.80	69.89	72.05	74.27
Recreational Irrigation	1.81	1.90	1.99	2.17	2.26	2.35
Power Generation	164.10	167.46	168.98	170.50	172.01	173.52
Agricultural	0.14	0.37	0.37	0.39	0.41	0.46

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	72.69	74.99	79.15	83.71	88.65	93.99
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	270.10	275.63	278.13	280.63	283.12	285.60
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	53.64	55.33	58.31	61.54	65.05	68.83
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	265.84	271.29	273.75	276.21	278.66	281.10
Agricultural	N/A	1.21	1.20	1.23	1.30	1.47

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	46.81	48.29	50.90	53.76	56.85	60.20
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	264.69	270.11	272.56	275.02	277.45	279.89
Agricultural	N/A	0.94	0.94	0.97	1.02	1.16

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Escambia County Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.97	1.97	1.97	1.97	1.97
Peak Month	1.45	1.45	1.45	1.45	1.44
Peak 3 Month	1.27	1.27	1.27	1.26	1.26

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Bratt-Davisville (PAR)	72.70	95.50	111.93	142.34	186.74	245.13
Central Water Works (LIN)	95.70	116.70	131.94	147.17	162.40	177.64
Century Utilities (LIN)	185.10	198.15	242.54	286.92	331.31	375.69
Cottage Hill Utilities (GEO)	121.30	118.57	122.21	125.97	129.84	133.83
Escambia County Utilities (LIN)	11,720.30	11,989.66	12,514.25	13,038.84	13,563.43	14,088.02
Farm Hill Utilities (GEO)	106.80	130.24	151.53	176.32	205.15	238.70
Gonzalez Utilities (GEO)	141.10	160.56	182.35	207.11	235.22	267.15
Molino Utilities (LIN)	212.30	247.88	290.72	333.55	376.38	419.22
Peoples Water System (PAR)	757.80	778.81	847.10	968.45	1,142.87	1,370.35
Walnut Hill Water Works (GEO)	69.60	71.91	73.95	76.05	78.21	80.43
Total	13,482.70	13,907.98	14,668.52	15,502.72	16,411.55	17,396.16

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Bratt-Davisville (PAR)	0.20	0.26	0.31	0.39	0.51	0.67
Central Water Works (LIN)	0.26	0.32	0.36	0.40	0.44	0.49
Century Utilities (LIN)	0.51	0.54	0.66	0.79	0.91	1.03
Cottage Hill Utilities (GEO)	0.33	0.32	0.33	0.35	0.36	0.37
Escambia County Utilities (LIN)	32.11	32.85	34.29	35.72	37.16	38.60
Farm Hill Utilities (GEO)	0.29	0.36	0.42	0.48	0.56	0.65
Gonzalez Utilities (GEO)	0.39	0.44	0.50	0.57	0.64	0.73
Molino Utilities (LIN)	0.58	0.68	0.80	0.91	1.03	1.15
Peoples Water System (PAR)	2.08	2.13	2.32	2.65	3.13	3.75
Walnut Hill Water Works (GEO)	0.19	0.20	0.20	0.21	0.21	0.22
Total	36.94	38.10	40.19	42.47	44.96	47.66

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Escambia County Summary

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Bratt-Davisville	1.85	1.46	1.23
Central Water Works	2.11	1.36	1.24
Century Utilities	1.99	1.21	1.15
Cottage Hill Utilities	2.09	1.46	1.24
Escambia County Utilities	1.96	1.47	1.28
Farm Hill Utilities	2.79	1.37	1.20
Gonzalez Utilities	1.62	1.37	1.22
Molino Utilities	2.57	1.40	1.29
Peoples Water System	1.88	1.27	1.17
Walnut Hill Water Works	1.95	1.27	1.16

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Bratt-Davisville	0.48	0.57	0.72	0.95	1.24
Central Water Works	0.67	0.76	0.85	0.94	1.03
Century Utilities	1.08	1.32	1.56	1.81	2.05
Cottage Hill Utilities	0.68	0.70	0.72	0.74	0.77
Escambia County Utilities	64.22	67.03	69.84	72.65	75.46
Farm Hill Utilities	1.00	1.16	1.35	1.57	1.82
Gonzalez Utilities	0.71	0.81	0.92	1.04	1.19
Molino Utilities	1.75	2.05	2.35	2.65	2.95
Peoples Water System	4.01	4.36	4.99	5.89	7.06
Walnut Hill Water Works	0.38	0.40	0.41	0.42	0.43
Total	74.99	79.15	83.71	88.65	93.99

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Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bratt-Davisville	0.38	0.45	0.57	0.75	0.98
Central Water Works	0.43	0.49	0.55	0.61	0.66
Century Utilities	0.66	0.81	0.95	1.10	1.25
Cottage Hill Utilities	0.48	0.49	0.51	0.52	0.54
Escambia County Utilities	48.39	50.50	52.62	54.74	56.85
Farm Hill Utilities	0.49	0.57	0.66	0.77	0.90
Gonzalez Utilities	0.60	0.68	0.78	0.88	1.00
Molino Utilities	0.95	1.12	1.28	1.45	1.61
Peoples Water System	2.70	2.94	3.36	3.96	4.75
Walnut Hill Water Works	0.25	0.26	0.26	0.27	0.28
Total	55.33	58.31	61.54	65.05	68.83

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bratt-Davisville	0.32	0.38	0.48	0.63	0.83
Central Water Works	0.40	0.45	0.50	0.55	0.60
Century Utilities	0.62	0.76	0.90	1.04	1.18
Cottage Hill Utilities	0.40	0.41	0.43	0.44	0.45
Escambia County Utilities	41.98	43.82	45.65	47.49	49.33
Farm Hill Utilities	0.43	0.50	0.58	0.68	0.79
Gonzalez Utilities	0.53	0.61	0.69	0.78	0.89
Molino Utilities	0.88	1.03	1.18	1.33	1.48
Peoples Water System	2.50	2.72	3.10	3.66	4.39
Walnut Hill Water Works	0.23	0.23	0.24	0.25	0.25
Total	48.29	50.90	53.76	56.85	60.20

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Escambia County	91%	92%	94%	95%	96%

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Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Bratt-Davisville	3,244	3,503	3,762	4,021	4,280
Central Water Works	2,583	2,777	2,970	3,164	3,357
Century Utilities	3,405	3,832	4,312	4,853	5,461
Cottage Hill Utilities	3,018	3,293	3,569	3,845	4,121
Escambia County Utilities	219,312	234,742	250,171	265,601	281,030
Farm Hill Utilities	3,472	3,874	4,277	4,679	5,081
Gonzalez Utilities	3,690	4,090	4,490	4,890	5,290
Molino Utilities	5,132	5,831	6,625	7,528	8,554
Peoples Water System	27,658	28,251	29,057	30,153	31,643
Walnut Hill Water Works	1,774	1,867	1,961	2,055	2,148
Total	273,287	292,060	311,195	330,788	350,965

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	100%	100%	100%	100%	100%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	300,372	316,471	332,570	348,669	364,768

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Champion International (UTIL)	10,740.58	11,089.65	11,450.06	11,822.19	12,206.41
Monsanto Incorporated	11,980.65	12,370.02	12,772.05	13,187.14	13,615.72
Pensacola NAS	1,003.10	1,003.10	1,003.10	1,003.10	1,003.10
Reichold Chemicals	156.70	156.70	156.70	156.70	156.70
University of West Florida	127.50	127.50	127.50	127.50	127.50
Total	24,008.53	24,746.97	25,509.41	26,296.63	27,109.43

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Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Champion International (UTIL)	29.43	30.38	31.37	32.39	33.44
Monsanto Incorporated	32.82	33.89	34.99	36.13	37.30
Pensacola Naval Air Station	2.75	2.75	2.75	2.75	2.75
Reichold Chemicals	0.43	0.43	0.43	0.43	0.43
University of West Florida	0.35	0.35	0.35	0.35	0.35
Total	65.78	67.80	69.89	72.05	74.27

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Champion International	1.26	1.12	1.10
Monsanto Incorporated	1.42	1.30	1.24
Pensacola NAS			
Reichold Chemicals			
University of West Florida			
Total	N/A	N/A	N/A

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Champion International	37.17	38.38	39.63	40.91	42.24
Monsanto Incorporated	46.61	48.12	49.69	51.30	52.97
Pensacola NAS	-	-	-	-	-
Reichold Chemicals	-	-	-	-	-
University of West Florida	-	-	-	-	-
Total	N/A	N/A	N/A	N/A	N/A

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020				
Champion International	32.93	34.00	35.10	36.24	37.42				
Monsanto Incorporated	42.61	43.99	45.42	46.90	48.42				
Pensacola NAS	-	-	-	-	-				
Reichold Chemicals	-	-	-	-	-				
University of West Florida	-	-	-	-	-				
Total	N/A	N/A	N/A	N/A	N/A				

Escambia County Summary

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Champion International	32.25	33.30	34.38	35.50	36.65
Monsanto Incorporated	40.54	41.85	43.22	44.62	46.07
Pensacola NAS	-	-	-	-	-
Reichold Chemicals	-	-	-	-	-
University of West Florida	-	-	-	-	-
Total	N/A	N/A	N/A	N/A	N/A

Golf Course Projections

Base Year: 1995		Projected: 2000-2020 Water Use in Mgal					
Total Population	282,742		Total	Number of	Acres	Total GC	
Total Number of Holes	180	Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0006366	2000	300,372	189	851	692.83	
Total Number Acres Irrigated	810	2005	316,471	198	891	725.83	
Inches Per Acre	30	2010	332,570	216	972	791.81	
Total GC Water Use in Mgal	659.84	2015	348,669	225	1013	824.80	
Water Use Per Hole in Mgal	3.67	2020	364,768	234	1053	857.79	

Golf Course Name	Holes	Location
A. C. Read Golf Club	27	Naval Air Station, Pensacola, 32508
Champions Golf Club	9	109 Mintz Lane, Cantonment, 32533
Creekside Golf Club	18	2355 West Michigan Ave., Pensacola, 32526
Green Medows GC	9	2500 Michigan Avenue, Pensacola, 32505
Marcus Pointe GC	18	2500 Oak Pointe Drive, Pensacola, 32505
Monsanto Employees Golf Asso	18	Pensacola, 32575
Osceola/City Municiple GC	18	300 Tonawanda Drive, Pensacola, 32506
Pensacola	18	1500 Bayshore Drive, Pensacola, 32507
Perdido Bay Resort	18	One Doug Ford Drive, Pensacola
Saufley GC	9	2424 Saufley Road, Pensacola, 32508
Scenic Hills CC	18	Burning Tree Road, Pensacola, 32514

180

Escambia County Summary

Power Generation: Projected Annual Flow

Year	1995	2000	2005	2010	2015	2020
Gulf Power - Crist Plant (UTIL)	59896.87	61122.91	61677.71	62232.51	62783.66	63334.81
Total	59,896.87	61,122.91	61,677.71	62,232.51	62,783.66	63,334.81

Power Generation: Projected Average Daily Flow (Mgal/d)

Year	1995	2000	2005	2010	2015	2020
Gulf Power - Crist Plant (UTIL)	164.10	167.46	168.98	170.50	172.01	173.52
Total	164.10	167.46	168.98	170.50	172.01	173.52

Power Generation: Ratios

Ratios	Max-Day	Peak Month	Peak3Month
Gulf Power - Crist Plant	1.65	1.62	1.61
Total	1.65	1.62	1.61

Power Generation: Projected Max Day

Year	1995	2000	2005	2010	2015	2020
Gulf Power - Crist Plant	270.10	275.63	278.13	280.63	283.12	285.60
Total	270.10	275.63	278.13	280.63	283.12	285.60

Power Generation: Projected Peak Month

Year	1995	2000	2005	2010	2015	2020
Gulf Power - Crist Plant	265.84	271.29	273.75	276.21	278.66	281.10
Total	265.84	271.29	273.75	276.21	278.66	281.10

Power Generation: Projected 3 Month Peak

Year	1995	2000	2005	2010	2015	2020
Gulf Power - Crist Plant	264.69	270.11	272.56	275.02	277.45	279.89
Total	264.69	270.11	272.56	275.02	277.45	279.89

Appendix 4.

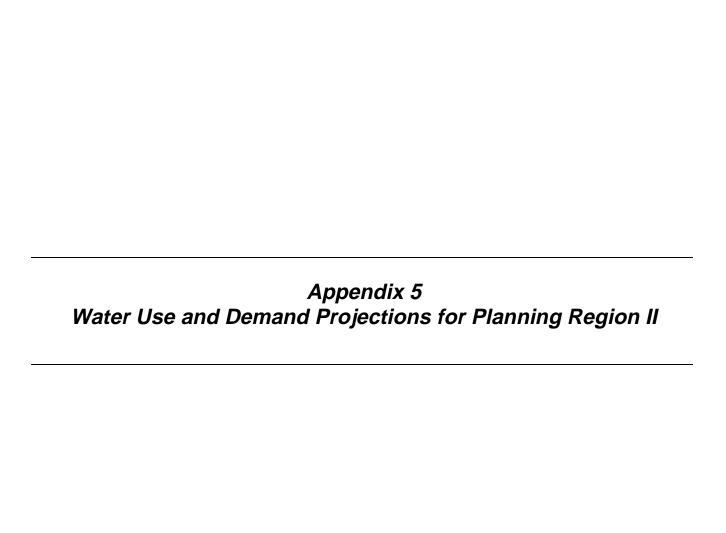
Planning Region I

c. Individually Projected Users

Projections in Mgal/d

							· · · · · · · · · · · · · · · · · · ·			
County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020	
Escambia	Bratt-Davisville W/S			PS	0.26	0.31	0.39	0.51	0.67	
Escambia	Central Water Works			PS	0.32	0.36	0.40	0.44	0.49	
Escambia	Century Utilities			PS	0.54	0.66	0.79	0.91	1.03	
Escambia	Cottage Hill Utilities			PS	0.32	0.33	0.35	0.36	0.37	
Escambia	Escambia County Utilities			PS	32.85	34.29	35.72	37.16	38.60	
Escambia	Farm Hill Utilities			PS	0.36	0.42	0.48	0.56	0.65	
Escambia	Gonzalez Utilities			PS	0.44	0.50	0.57	0.64	0.73	
Escambia	Molino Utilities			PS	0.68	0.80	0.91	1.03	1.15	
Escambia	Peoples Water System			PS	2.13	2.32	2.65	3.13	3.75	
Escambia	Walnut Hill Water Works			PS	0.20	0.20	0.21	0.21	0.22	
Escambia	Champion International			C-I	29.43	30.38	31.37	32.39	33.44	
Escambia	Monsanto Incorporated			C-I	32.82	33.89	34.99	36.13	37.30	
Escambia	U.S. Navy: Pensacola NAS			C-I	2.75	2.75	2.75	2.75	2.75	
Escambia	Gulf Power Company	Crist Plant		PWR	167.46	168.98	170.5	172.01	173.52	

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.



Appendix 5. Planning Region II a. System Inventory

1995 water use

					A	Daire	D 1	0	D 1
11635 /0	DI // '''		400		Average	Primary	Percent	•	Percent
Utility/Owner	Plant/facility	County	ASC		Day in Mgal	Water Source	used	Water Source	used
Florida Dept. of Corrections	Okaloosa Correctional	Okaloosa		C-I	0.17	Floridan aquifer	100		
Florida Dept. of Transportation	I-10 Rest Area	Okaloosa		C-I	0.01	Floridan aquifer	100		
US Air Force: Eglin AFB	Field 3 System	Okaloosa	1	C-I	0.06	Floridan aquifer	100	_	
US Air Force: Eglin AFB	Field 6 System	Okaloosa	1	C-I	0.05	Floridan aquifer	100	Bay County	N/A
US Air Force: Eglin AFB	Main System	Okaloosa	1	C-I	1.60	Floridan aquifer	100		
US Air Force: Eglin AFB	Housing System	Okaloosa	1	C-I	2.07	Floridan aquifer	100		
US Air Force: Eglin AFB	Beach Club	Okaloosa	1	C-I	0.01	Floridan aquifer	100		
US Air Force: Eglin AFB	Officers Club	Okaloosa	1	C-I	0.00	Floridan aquifer	100		
US Air Force: Hulbert Field AFB		Okaloosa	1	C-I	0.81	Floridan aquifer	100		
US Coast Guard	Destin Station	Okaloosa	1	C-I	0.02	Floridan aquifer	100		
Florida Mining	Destin Plant	Okaloosa	1	C-I	0.02	Floridan aquifer	100		
Metric Systems Incorporated		Okaloosa		C-I	0.02	Floridan aquifer	100		
Auburn Water System		Okaloosa		PS	1.11	Floridan aquifer	100		
Baker Water System		Okaloosa		PS	0.16	Floridan aquifer	100		
Crestview, city of		Okaloosa		PS	2.04	Floridan aquifer	100		
Destin Water Users		Okaloosa	1	PS	2.83	Floridan aquifer	100		
Fort Walton Beach, city of		Okaloosa	1	PS	3.29	Floridan aquifer	100		
Holt Water System		Okaloosa		PS	0.09	Floridan aquifer	100		
Laurel Hill, city of		Okaloosa		PS	0.13	Floridan aquifer	100		
Mary Ester, city of		Okaloosa	1	PS	0.77	Floridan aquifer	100		
Milligan Water System		Okaloosa	-	PS	0.14	Floridan aquifer	100		
Niceville, town of		Okaloosa	1	PS	2.80	Floridan aquifer	100		
Okaloosa County Water/Sewer	Bluewater Bay	Okaloosa	1	PS	1.03	Floridan aquifer	100		
	Mid County-Del Cerro	Okaloosa	-	PS	0.33	Floridan aquifer	100		
	Main (Garnier)	Okaloosa	1	PS	5.19	Floridan aquifer	100		
	County West-Seashore	Okaloosa	1	PS	0.56	Floridan aquifer	100		
Seminole Community W/S	county treet coustions	Okaloosa	1	PS	0.11	Floridan aquifer	100		
Valparaiso, city of		Okaloosa	1	PS	0.62	Floridan aquifer	100		
Bluewater Bay Resort		Okaloosa	1	R-I	N/A	Unnamed ponds	100	Floridan aquifer	SB
Emerald Bay Plantation		Okaloosa	1	R-I	N/A	Reuse system	100	Floridan aquifer	SB
Fort Walton Beach, city of	Municipal Golf Course	Okaloosa	1	R-I	N/A	Reuse system	N/A	Sand-gravel aquifer	N/A
Foxwood Country Club	Maniopai Coli Coulsc	Okaloosa		R-I	N/A	Floridan aquifer	100	Sana graver aquiler	13/73
Gator Lakes Golf Course		Okaloosa	1	R-I	N/A	N/A	N/A		
Indian Bayou Golf Course		Okaloosa	1	R-I	N/A	N/A	N/A		
Island Golf Center		Okaloosa	1	R-I	N/A	Unnamed pond	100		
Rockey Bayou Golf Course		Okaloosa	1	R-I	N/A	Reuse system	100		
Sandpiper Cove Golf Club		Okaloosa	1	R-I	N/A	Reuse system	100		
Shalimar Pointe Golf Course		Okaloosa	1	R-I	N/A	Unnamed ponds	100	Floridan aquifer	SB
Shaiinai Pointe Goll Course		Okaioosa	l I	L-I	IN/A	onnamed ponds	100	rionuan aquiler	OB

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Shoal River Golf Course		Okaloosa		R-I	N/A	N/A	N/A		
US Air Force: Eglin AFB	Golf Course	Okaloosa	1	R-I	N/A	Unnamed ponds	100		
Florida Dept. of Corrections	Blackwater Facility	Santa Rosa		C-I	0.01	Floridan aquifer	100		
US Navy: Choctow Field		Santa Rosa		C-I	0.02	Sand-gravel aquifer	N/A		
US Navy: Whiting Field		Santa Rosa		C-I		Sand-gravel aquifer	100		
Air Products		Santa Rosa		C-I		Sand-gravel aquifer	100	City of Pace	N/A
Sterling Fibers (Cytec)	Santa Rosa Plant	Santa Rosa		C-I	3.42	Sand-gravel aquifer	100	-	
Bagdad/Garron W/S		Santa Rosa		PS	0.39	Sand-gravel aquifer	100		
Berrydale Water System		Santa Rosa		PS	0.21	Sand-gravel aquifer	100		
Chumuckla, town of		Santa Rosa		PS	0.27	Sand-gravel aquifer	100		
East Milton Water System		Santa Rosa		PS	0.77	Sand-gravel aquifer	100	Floridan aquifer	SB
Gulf Breeze, city of		Santa Rosa	1	PS	0.79	scambia County Utilit	100		
Holly/Navarre W/S		Santa Rosa	1	PS	1.48	Floridan aquifer	100		
Jay, town of		Santa Rosa		PS	0.28	Sand-gravel aquifer	100		
Midway Water System		Santa Rosa	1	PS	1.72	Floridan aquifer	85	Sand-gravel aquifer	15
Milton, city of		Santa Rosa		PS	1.98	Sand-gravel aquifer	100		
Moore Creek/Mt. Carmel		Santa Rosa		PS		Sand-gravel aquifer	100		
Navarre Beach		Santa Rosa	1	PS	0.27	Floridan aquifer	100		
Pace, city of		Santa Rosa		PS	2.59	Sand-gravel aquifer	100		
Point Baker Water System		Santa Rosa		PS	0.66	Sand-gravel aquifer	100		
South Santa Rosa Utilities		Santa Rosa	1	PS	0.79	Sand-gravel aquifer	100		
Club at Hidden Creek		Santa Rosa	1	R-I	N/A	Reuse system	90	Unnamed pond	10
The Moores Golf Club		Santa Rosa		R-I	N/A	N/A	N/A		
Santa Rosa Golf & Beach Club		Santa Rosa	1	R-I	N/A	N/A	N/A		
Stonebrook Village Golf Center		Santa Rosa		R-I	N/A	Reuse system	100	Unnamed pond	SB
Tanglewood Golf Course		Santa Rosa		R-I	N/A	Floridan aquifer	100		
Tiger Point Golf Course		Santa Rosa	1	R-I	0.79	N/A	N/A		
US Navy: Whiting Field	Golf Course	Santa Rosa		R-I	N/A	Sand-gravel aquifer	100		
Holiday Travel Park		Walton		C-I	0.01	Floridan aquifer	N/A		
US Air Force: Eglin AFB	Field C-6 System	Walton	1	C-I	0.04	Floridan aquifer	N/A		
Purdue Farms (Showell)		Walton		C-I	0.87	Floridan aquifer	N/A		
Argyle Water System		Walton		PS	0.06	Floridan aquifer	100		
Beachwood Villas W/S		Walton	1	SPS	0.01	Floridan aquifer	100		
DeFuniak Springs, city of		Walton		PS	1.00	Floridan aquifer	100		
Freeport, town of		Walton	1	PS	0.29	Floridan aquifer	100		
Gulf Trace Water System		Walton	1	SPS	0.02	Floridan aquifer	100		
Inlet Beach Water System		Walton	1	PS	0.07	Floridan aquifer	100	Intermediate aquifer	SB
Lake Sharon Estates W/S		Walton		SPS	0.02	Floridan aquifer	100	•	
Mossy Head Water System		Walton		PS	0.08	Floridan aquifer	100		
Paxton, town of		Walton		PS	0.20	Floridan aquifer	100		
Saddlebrook Downs W/S		Walton		SPS	0.01	Floridan aquifer	100		
Regional Utilities	Fl. Comm. Srvc. Corp.	Walton	1	PS	0.72		100		

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Smith Water Company	Villa Tasso	Walton	1	PS	0.06	Floridan aquifer	100		
Smith Water Company	Choctaw Beach	Walton	1	PS	0.07	Floridan aquifer	100		
South Walton Utilities		Walton	1	PS	1.80	Floridan aquifer	100		
Ten Lake Estates W/S		Walton		SPS	0.01	Floridan aquifer	100		
D.I. Development		Walton	1	R-I	N/A	N/A	N/A		
Gardens of Destin		Walton	1	R-I	N/A	Reuse system	100		
Sandestin Resort Golf Club		Walton	1	R-I	N/A	Reuse system	N/A	Sand-gravel aquifer	N/A
Santa Rosa Golf & Beach Club		Walton	1	R-I	N/A	Unnamed ponds	100	Sand-gravel aquifer	SB
Seascape Resort Golf Course		Walton	1	R-I	N/A	N/A	N/A		

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 5.

Planning Region II

b. Projection summary tables

The following projections were prepared by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the Northwest Florida Water Management District. These projections are for planning purposes only.

Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; Northwest Florida Water Management District; Bureau of Economic and Business Research; and individual utilities.

Footnotes and Specific Utility Projection Information:

Okaloosa County

- Okaloosa County Water and Sewer (Bluewater Bay): Due to the projection models inability to consider special boundaries and limits, the USGS projection increased beyond what was considered possible for the utilities current service area, thus the water use projection provided by Poly Engineering was used for this utility.
- Eglin Air Force Base: Was projected as an aggregate of all Eglin systems reported to the USGS. Santa Rosa County
- City of Gulf Breeze: Was extracted from Escambia County Utility Authority, projected individually and not counted in Escambia County.
- South Santa Rosa Utilities: All water is currently purchased from a combination of Midway Water System, City of Gulf Breeze, and Escambia County Utility Authority. Water demands for South Santa Rosa Utilities were projected individually, although demand may also be accounted for in Midway Water System, City of Gulf Breeze, and Escambia County Utility Authority's projections.
 Walton County
- Regional Utilities (also known as Florida Community Services Corporation): Historical water use (1992-1996) was provided by NWFWMD pumping reports, all remaining historical data was provided by USGS. Note that projection base is a total of Seagrove Beach, Camp Creek, and Westside/Sandcliff systems. Because Regional Utilities acquired Camp Creek and Westside/Sandcliff systems in 1996, no individual water use data was available for these systems in 1996. It is assumed that Seagrove, which was reported to the USGS in 1996, included the water use for Camp Creek and Westside/Sandcliff systems for 1996.
- Fort Walton Beach: The water use projection provided by the utility was substituted for the projections produced by the standard method employed herein because erratic historical data produced improbable projections, such as zero growth and negative growth.
- Smith Water Company: Was projected as an aggregate of Villa Tasso and Choctaw Beach systems, due to their low water use.

Planning Region II Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,885.20	38.04	75.19	65.63	64.25	141	269,711	92.3%	
Domestic S.S. & Small Public S.S.	1,192.73	3.27				145	22,502	7.7%	
Commercial-Industrial Self-supplied	4,295.70	11.77	N/A	N/A	N/A				
Recreational Irrigation	1,979.53	5.42							2,430
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	543.13	1.49	N/A	N/A	N/A				N/A

Total 21,896.29 59.99 292,213 2,430

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Catagory	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	15,597.46	42.73	84.41	73.96	72.46	142	301,075	92.1%	
Domestic S.S. & Small Public S.S.	1,374.47	3.77				146	25,839	7.9%	
Commercial-Industrial Self-supplied	4,903.71	13.43	N/A	N/A	N/A				
Recreational Irrigation	2,210.47	6.06							2,714
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	214.57	0.59	N/A	1.07	0.94				195

Total 24,300.68 66.58 326,914 2,909

2005 Water Use Projection

2000 Water Ode Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	17,403.16	47.68	94.27	82.95	81.34	146	325,892	92.7%	
Domestic S.S. & Small Public S.S.	1,395.72	3.82				148	25,851	7.3%	
Commercial-Industrial Self-supplied	5,150.12	14.11	N/A	N/A	N/A				
Recreational Irrigation	2,375.43	6.51							2,916
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	228.13	0.63	N/A	1.14	1.00				207

Total 26,552.57 72.75 351,743 3,123

Planning Region II Summary

2010 Water Use Projection

·		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	19,279.69	52.82	104.54	92.32	90.59	150	352,485	93.1%	
Domestic S.S. & Small Public S.S.	1,458.73	4.00				153	26,155	6.9%	
Commercial-Industrial Self-supplied	5,397.00	14.79	N/A	N/A	N/A				
Recreational Irrigation	2,540.39	6.96							3,119
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	250.77	0.69	N/A	1.25	1.09				225
Total	28,926.58	79.25					378,640		3,344

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	21,153.22	57.95	114.77	101.60	99.74	153	378,980	92.5%	
Domestic S.S. & Small Public S.S.	1,750.53	4.80				155	30,938	7.5%	
Commercial-Industrial Self-supplied	5,662.63	15.51	N/A	N/A	N/A				
Recreational Irrigation	2,804.33	7.68							3,443
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	268.64	0.74	N/A	1.33	1.17				241
Total	31,639.36	86.68					409,918		3,684

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	23,058.62	63.17	125.18	111.02	109.03	157	403,574	91.2%	
Domestic S.S. & Small Public S.S.	2,259.81	6.19				160	38,777	8.8%	
Commercial-Industrial Self-supplied	5,933.76	16.26	N/A	N/A	N/A				
Recreational Irrigation	3,002.28	8.23							3,686
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	293.47	0.80	N/A	1.45	1.19				263

Total 34,547.94 94.65 442,351 3,949

Planning Region II Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	38.04	42.73	47.68	52.82	57.95	63.17
Domestic S.S. & Small Public S.S.	3.27	3.77	3.82	4.00	4.80	6.19
Commercial-Industrial Self-supplied	11.77	13.43	14.11	14.79	15.51	16.26
Recreational Irrigation	5.42	6.06	6.51	6.96	7.68	8.23
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	1.49	0.59	0.63	0.69	0.74	0.80

Maximum Daily Flow in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	75.19	84.41	94.27	104.54	114.77	125.18
Domestic S.S. & Small Public S.S.	-	-	-	-	-	-
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	65.63	73.96	82.95	92.32	101.60	111.02
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	1.07	1.14	1.25	1.33	1.45

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	64.25	72.46	81.34	90.59	99.74	109.03
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.94	1.00	1.09	1.17	1.19

Area of Special Concern (ASC)-1 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	9,217.70	25.25	47.55	37.95	36.48	143	176,480	91.4%	
Domestic S.S. & Small Public S.S.	875.37	2.40				145	16,583	8.6%	
Commercial-Industrial Self-supplied	1,385.30	3.80	N/A	N/A	N/A				
Recreational Irrigation	1,550.63	4.25							1,904
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 13,029.00 35.70 193,063 1,904

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,403.69	28.50	53.65	43.16	41.56	147	194,281	91.0%	
Domestic S.S. & Small Public S.S.	1,026.78	2.81				147	19,128	9.0%	
Commercial-Industrial Self-supplied	1,993.31	5.46	N/A	N/A	N/A				
Recreational Irrigation	1,715.59	4.70							2,106
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 15,139.37 41.48 213,410 2,106

2005 Water Use Projection

2000 Water Ode Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	11,572.07	31.70	59.64	48.29	46.55	149	213,096	92.6%	
Domestic S.S. & Small Public S.S.	926.46	2.54				149	17,012	7.4%	
Commercial-Industrial Self-supplied	2,057.22	5.64	N/A	N/A	N/A				
Recreational Irrigation	1,847.56	5.06							2,268
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 16,403.31 44.94 230,109 2,268

Area of Special Concern (ASC)-1 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	12,768.22	34.98	65.79	53.52	51.65	152	229,963	92.8%	
Domestic S.S. & Small Public S.S.	983.00	2.69				152	17,742	7.2%	
Commercial-Industrial Self-supplied	2,121.60	5.81	N/A	N/A	N/A				
Recreational Irrigation	1,979.53	5.42							2,430
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	17,852.34	48.91					247,705		2,430

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,989.98	38.33	72.06	58.84	56.83	156	245,443	91.9%	
Domestic S.S. & Small Public S.S.	1,235.51	3.38				156	21,762	8.1%	
Commercial-Industrial Self-supplied	2,186.48	5.99	N/A	N/A	N/A				
Recreational Irrigation	2,177.48	5.97							2,673
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 19,589.45 53.67 267,205 2,673

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	15,246.01	41.77	78.51	64.29	62.14	161	259,620	90.3%	
Domestic S.S. & Small Public S.S.	1,653.72	4.53				162	28,045	9.7%	
Commercial-Industrial Self-supplied	2,251.86	6.17	N/A	N/A	N/A				
Recreational Irrigation	2,342.44	6.42							2,876
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 21,494.03 58.89 287,665 2,876

Area of Special Concern (ASC)-1 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	25.25	28.50	31.70	34.98	38.33	41.77
Domestic S.S. & Small Public S.S.	2.40	2.81	2.54	2.69	3.38	4.53
Commercial-Industrial Self-supplied	3.80	5.46	5.64	5.81	5.99	6.17
Recreational Irrigation	4.25	4.70	5.06	5.42	5.97	6.42
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	47.55	53.65	59.64	65.79	72.06	78.51
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	37.95	43.16	48.29	53.52	58.84	64.29
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	36.48	41.56	46.55	51.65	56.83	62.14
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Non-Area of Special Concern (NonASC)-1 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,667.50	12.79	27.64	27.67	27.77	137	93,231	94.0%	
Domestic S.S. & Small Public S.S.	317.36	0.87				147	5,919	6.0%	
Commercial-Industrial Self-supplied	2,910.40	7.97	N/A	N/A	N/A				
Recreational Irrigation	428.90	1.18							527
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 8,324.16 22.81 99,150 527

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,193.77	14.23	30.76	30.80	30.91	133	106,794	94.1%	
Domestic S.S. & Small Public S.S.	347.69	0.95				142	6,710	5.9%	
Commercial-Industrial Self-supplied	2,910.40	7.97	N/A	N/A	N/A				
Recreational Irrigation	494.88	1.36							608
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 8,946.74 24.51 113,504 608

2005 Water Use Projection

·		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,831.09	15.98	34.62	34.67	34.79	142	112,796	92.7%	
Domestic S.S. & Small Public S.S.	469.26	1.29				145	8,838	7.3%	
Commercial-Industrial Self-supplied	3,092.90	8.47	N/A	N/A	N/A				
Recreational Irrigation	527.87	1.45							648
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 9,921.13 27.18 121,634 648

Non-Area of Special Concern (NonASC)-1 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	6,511.47	17.84	38.76	38.80	38.94	146	122,522	93.6%	
Domestic S.S. & Small Public S.S.	475.73	1.30				155	8,413	6.4%	
Commercial-Industrial Self-supplied	3,275.40	8.97	N/A	N/A	N/A				
Recreational Irrigation	560.87	1.54							689
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	10,823.47	29.65					130,935		689

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	7,163.25	19.63	42.71	42.76	42.91	147	133,537	93.6%	
Domestic S.S. & Small Public S.S.	515.03	1.41				154	9,176	6.4%	
Commercial-Industrial Self-supplied	3,476.15	9.52	N/A	N/A	N/A				
Recreational Irrigation	626.85	1.72							770
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 11,781.27 32.28 142,713 770

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	7,812.61	21.40	46.67	46.73	46.90	149	143,954	93.1%	
Domestic S.S. & Small Public S.S.	606.08	1.66				155	10,732	6.9%	
Commercial-Industrial Self-supplied	3,681.90	10.09	N/A	N/A	N/A				
Recreational Irrigation	659.84	1.81							810
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 12,760.44 34.96 154,686 810

Non-Area of Special Concern (NonASC)-1 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	12.79	14.23	15.98	17.84	19.63	21.40
Domestic S.S. & Small Public S.S.	0.87	0.95	1.29	1.30	1.41	1.66
Commercial-Industrial Self-supplied	7.97	7.97	8.47	8.97	9.52	10.09
Recreational Irrigation	1.18	1.36	1.45	1.54	1.72	1.81
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	27.64	30.76	34.62	38.76	42.71	46.67
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	27.67	30.80	34.67	38.80	42.76	46.73
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	27.77	30.91	34.79	38.94	42.91	46.90
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Okaloosa County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	7,731.65	21.18	41.84	32.20	30.71	142	149,665	92.0%	
Domestic S.S. & Small Public S.S.	680.58	1.86				143	13,042	8.0%	
Commercial-Industrial Self-supplied	1,448.70	3.97	N/A	N/A	N/A				
Recreational Irrigation	956.77	2.62							1,175
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	447.13	1.23	N/A	N/A	N/A				N/A

Total 11,264.83 30.86 162,707 1,175

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,463.78	23.19	45.82	35.27	33.64	146	158,482	91.6%	
Domestic S.S. & Small Public S.S.	775.69	2.13				147	14,500	8.4%	
Commercial-Industrial Self-supplied	2,056.71	5.63	N/A	N/A	N/A				
Recreational Irrigation	1,022.76	2.80							1,256
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	73.37	0.20	N/A	0.35	0.31				57

Total 12,392.30 33.95 172,982 1,313

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	9,265.02	25.38	50.24	38.81	37.05	147	172,701	92.3%	
Domestic S.S. & Small Public S.S.	775.40	2.12				147	14,427	7.7%	
Commercial-Industrial Self-supplied	2,120.62	5.81	N/A	N/A	N/A				
Recreational Irrigation	1,088.74	2.98							1,337
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	78.11	0.21	N/A	0.38	0.33				61

Total 13,327.89 36.51 187,128 1,398

Okaloosa County Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,114.79	27.71	54.94	42.59	40.68	150	184,220	91.5%	
Domestic S.S. & Small Public S.S.	940.35	2.58				151	17,055	8.5%	
Commercial-Industrial Self-supplied	2,185.00	5.99	N/A	N/A	N/A				
Recreational Irrigation	1,154.72	3.16							1,418
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	85.78	0.24	N/A	0.41	0.37				67
Total	14,480.64	39.67					201,275		1,485

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,959.71	30.03	59.59	46.27	44.22	153	195,747	90.9%	
Domestic S.S. & Small Public S.S.	1,098.09	3.01				153	19,674	9.1%	
Commercial-Industrial Self-supplied	2,249.88	6.16	N/A	N/A	N/A				
Recreational Irrigation	1,286.69	3.53							1,580
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	91.98	0.25	N/A	0.44	0.39				71
Total	15,686.36	42.98					215,421		1,651

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	11,880.50	32.55	64.68	50.36	48.16	158	205,438	89.5%	
Domestic S.S. & Small Public S.S.	1,385.33	3.80				157	24,129	10.5%	
Commercial-Industrial Self-supplied	2,315.26	6.34	N/A	N/A	N/A				
Recreational Irrigation	1,352.68	3.71							1,661
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	100.38	0.28	N/A	0.48	0.43				78

Total 17,034.14 46.67 229,567 1,739

Okaloosa County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	21.18	23.19	25.38	27.71	30.03	32.55
Domestic S.S. & Small Public S.S.	1.86	2.13	2.12	2.58	3.01	3.80
Commercial-Industrial Self-supplied	3.97	5.63	5.81	5.99	6.16	6.34
Recreational Irrigation	2.62	2.80	2.98	3.16	3.53	3.71
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	1.23	0.20	0.21	0.24	0.25	0.28

Maximum Daily Flow in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	41.84	45.82	50.24	54.94	59.59	64.68
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	32.20	35.27	38.81	42.59	46.27	50.36
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.35	0.38	0.41	0.44	0.48

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	30.71	33.64	37.05	40.68	44.22	48.16
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.31	0.33	0.37	0.39	0.43

Okaloosa County ASC-1 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	6,276.25	17.20	32.54	22.85	21.30	138	124,183	92.7%	
Domestic S.S. & Small Public S.S.	494.39	1.35				138	9,782	7.3%	
Commercial-Industrial Self-supplied	1,385.30	3.80	N/A	N/A	N/A				
Recreational Irrigation	824.80	2.26							1,013
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 8,980.74 24.60 133,965 1,013

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	6,861.65	18.80	35.57	24.98	23.29	146	129,162	92.2%	
Domestic S.S. & Small Public S.S.	581.89	1.59				146	10,953	7.8%	
Commercial-Industrial Self-supplied	1,993.31	5.46	N/A	N/A	N/A				
Recreational Irrigation	857.79	2.35							1,053
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 10,294.64 28.20 140,115 1,053

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	7,439.08	20.38	38.57	27.09	25.25	145	140,292	92.6%	
Domestic S.S. & Small Public S.S.	598.19	1.64				145	11,281	7.4%	
Commercial-Industrial Self-supplied	2,057.22	5.64	N/A	N/A	N/A				
Recreational Irrigation	923.78	2.53							1,134
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 11,018.27 30.19 151,574 1,134

Okaloosa County ASC-1 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,043.78	22.04	41.70	29.29	27.30	147	149,777	91.9%	
Domestic S.S. & Small Public S.S.	711.90	1.95				147	13,256	8.1%	
Commercial-Industrial Self-supplied	2,121.60	5.81	N/A	N/A	N/A				
Recreational Irrigation	989.76	2.71							1,215
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	11,867.05	32.51					163,033		1,215

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,670.08	23.75	44.95	31.57	29.43	150	158,021	90.6%	
Domestic S.S. & Small Public S.S.	903.64	2.48				150	16,470	9.4%	
Commercial-Industrial Self-supplied	2,186.48	5.99	N/A	N/A	N/A				
Recreational Irrigation	1,088.74	2.98							1,337
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 12,848.93 35.20 174,491 1,337

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	9,326.36	25.55	48.35	33.96	31.66	155	165,075	88.8%	
Domestic S.S. & Small Public S.S.	1,179.37	3.23				155	20,875	11.2%	
Commercial-Industrial Self-supplied	2,251.86	6.17	N/A	N/A	N/A				
Recreational Irrigation	1,154.72	3.16							1,418
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 13,912.31 38.12 185,949 1,418

Okaloosa County ASC-1 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	17.20	18.80	20.38	22.04	23.75	25.55
Domestic S.S. & Small Public S.S.	1.35	1.59	1.64	1.95	2.48	3.23
Commercial-Industrial Self-supplied	3.80	5.46	5.64	5.81	5.99	6.17
Recreational Irrigation	2.26	2.35	2.53	2.71	2.98	3.16
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	32.54	35.57	38.57	41.70	44.95	48.35
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	22.85	24.98	27.09	29.29	31.57	33.96
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	21.30	23.29	25.25	27.30	29.43	31.66
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.89	1.89	1.89	1.88	1.88
Peak Month	1.33	1.33	1.33	1.33	1.34
Peak 3 Month	1.24	1.24	1.24	1.24	1.24

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Destin (GEO)	1031.60	1,147.68	1,286.32	1,441.70	1,615.86	1,811.06
Fort Walton Beach (UTIL)	1200.70	1,263.27	1,354.33	1,445.40	1,534.83	1,624.25
Niceville (LIN)	1021.40	1,148.05	1,300.55	1,453.06	1,605.57	1,758.07
Seminole Comm (LIN)	40.00	36.30	35.86	35.42	34.98	34.54
Valparaiso (EXP)	226.70	230.77	233.33	234.51	235.06	235.31
Mary Esther (GEO)	279.80	282.43	295.78	309.76	324.40	339.73
Okaloosa Co. Water & Sewer						
Main Water System (EXP)	1895.70	2,079.27	2,205.12	2,338.59	2,480.13	2,630.25
Bluewater-Raintree(Poly Eng)	375.95	434.35	463.55	496.40	525.60	554.80
Seashore Village/Co. West(LIN)	204.40	239.53	264.24	288.94	313.65	338.35
Total	6,276.25	6,861.65	7,439.08	8,043.78	8,670.08	9,326.36

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Destin (GEO)	2.83	3.14	3.52	3.95	4.43	4.96
Fort Walton Beach (UTIL)	3.29	3.46	3.71	3.96	4.21	4.45
Niceville (LIN)	2.80	3.15	3.56	3.98	4.40	4.82
Seminole Comm (LIN)	0.11	0.10	0.10	0.10	0.10	0.09
Valparaiso (EXP)	0.62	0.63	0.64	0.64	0.64	0.64
Mary Esther (GEO)	0.77	0.77	0.81	0.85	0.89	0.93
Okaloosa Co. Water & Sewer	-	-	-	-	-	-
Main Water System (EXP)	5.19	5.70	6.04	6.41	6.79	7.21
Bluewater-Raintree(Poly Eng)	1.03	1.19	1.27	1.36	1.44	1.52
Seashore Village/Co. West(LIN)	0.56	0.66	0.72	0.79	0.86	0.93
Total	17.20	18.80	20.38	22.04	23.75	25.55

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Destin	1.64	1.41	1.35
Fort Walton Beach	1.50	1.21	1.15
Niceville	1.93	1.50	1.27
Seminole Comm	2.32	1.70	1.38
Valparaiso	2.28	1.68	1.30
Mary Esther	1.60	1.16	1.13
Okaloosa Co. Water & Sewer			
Main Water System	2.30	1.25	1.22
Bluewater-Raintree	1.62	1.26	1.18
Seashore Village/Co. West	1.85	1.40	1.32

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Destin	5.16	5.78	6.48	7.26	8.14
Fort Walton Beach	5.19	5.57	5.94	6.31	6.68
Niceville	6.07	6.88	7.68	8.49	9.30
Seminole Comm	0.23	0.23	0.23	0.22	0.22
Valparaiso	1.44	1.46	1.46	1.47	1.47
Mary Esther	1.24	1.30	1.36	1.42	1.49
Okaloosa Co. Water & Sewer	-	-	-	-	-
Main Water System	13.10	13.90	14.74	15.63	16.57
Bluewater-Raintree	1.93	2.06	2.20	2.33	2.46
Seashore Village/Co. West	1.21	1.34	1.46	1.59	1.71
Total	35.57	38.50	41.55	44.72	48.04

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Destin	4.43	4.97	5.57	6.24	7.00
Fort Walton Beach	4.18	4.48	4.78	5.08	5.38
Niceville	4.72	5.34	5.97	6.60	7.22
Seminole Comm	0.17	0.17	0.16	0.16	0.16
Valparaiso	1.06	1.07	1.08	1.08	1.08
Mary Esther	0.90	0.94	0.98	1.03	1.08
Okaloosa Co. Water & Sewer	-	-	-	-	-
Main Water System	7.12	7.55	8.00	8.49	9.00
Bluewater-Raintree	1.50	1.60	1.71	1.81	1.91
Seashore Village/Co. West	0.92	1.01	1.11	1.20	1.30
Total	24.98	27.13	29.37	31.69	34.12

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Destin	4.24	4.75	5.32	5.97	6.69
Fort Walton Beach	3.98	4.27	4.55	4.84	5.12
Niceville	3.99	4.53	5.06	5.59	6.12
Seminole Comm	0.14	0.14	0.13	0.13	0.13
Valparaiso	0.82	0.83	0.84	0.84	0.84
Mary Esther	0.87	0.92	0.96	1.00	1.05
Okaloosa Co. Water & Sewer	-	-	-	-	-
Main Water System	6.97	7.39	7.84	8.32	8.82
Bluewater-Raintree	1.41	1.50	1.61	1.70	1.80
Seashore Village/Co. West	0.86	0.95	1.04	1.13	1.22
Total	23.29	25.27	27.35	29.51	31.78

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Okaloosa County ASC-1	92%	93%	92%	91%	89%

Population Served by Utility

Year	2000	2005	2010	2015	2020
Destin	14,354	16,449	18,544	20,638	22,733
Fort Walton Beach	22,894	22,961	23,027	23,319	23,612
Niceville	16,775	18,735	20,695	22,655	24,615
Seminole Comm	629	588	543	505	463
Valparaiso	3,949	3,893	3,848	3,812	3,782
Mary Esther	5,969	6,453	6,936	7,419	7,902
Okaloosa Co. Water & Sewer	64,592	71,213	76,184	79,673	81,968
Main Water System					
Bluewater-Raintree					
Seashore Village/Co. West					
Total	129,162	140,292	149,777	158,021	165,075

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	81%	81%	81%	81%	81%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	140,115	151,574	163,033	174,491	185,949

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Eglin AFB (Geo)	1669.27	1697.71	1726.62	1756.03	1785.94
Hurlburt Field (Lin)	324.04	359.51	394.98	430.45	465.92
Total	1993.31	2057.22	2121.60	2186.48	2251.86

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Eglin AFB (Geo)	4.57	4.65	4.73	4.81	4.89
Hurlburt Field (Lin)	0.89	0.98	1.08	1.18	1.28
Total	5.46	5.64	5.81	5.99	6.17

Golf Course Projections

Base Year: 1995			Projected: 2000-2020 Water Use in Mgal						
Total Population	133,965			Total	Number of	Acres	Total GC		
Total Number of Holes	225		Year	Population	Holes	Irrigated	Water Us		
Holes Per Person	0.0016795		2000	140,115	234	1053	857.79		
Total Number Acres Irrigated	1,013		2005	151,574	252	1134	923.78		
Inches Per Acre	30		2010	163,033	270	1215	989.76		
Total GC Water Use in Mgal	824.80		2015	174,491	297	1337	1,088.74		
Water Use Per Hole in Mgal	3.67		2020	185,949	315	1418	1,154.72		

Golf Course Name	Holes	Location
Bluewater Bay CC (1)	18	2000 Bluewater Blvd., Niceville, 32411
Bluewater Bay CC (2)	18	2000 Bluewater Blvd., Niceville, 32411
Emerald Bay Plantation	18	40001 Emerald Coast Highway, Destin, 32541
Ft. Walt. Bch Municiple GC (1)	18	P. O. Box 4009, Ft. Walton Beach, 32549
Ft. Walt. Bch Municiple GC (2)	18	P. O. Box 4009, Ft. Walton Beach, 32549
Gator Lakes Golf Course	18	91300 Golf Course Rd., Hurlburt Field, 32544
Indian Bayou Golf & CC (1)	18	Airport Road, Destin, 32541
Indian Bayou Golf & CC (2)	9	Airport Road, Destin, 32541
Island Golf Center	9	1306 Miracle Strip Parkway, Ft Walton Bch., 32548
Rockey Bayou Golf Course	18	Country Club Drive, Niceville, 32578
Sandpiper Cove GC	9	off Highway 98, Destin, 32541
Shalimar Pointe Golf & CC	18	2 Country Club Drive, Shalimar, 32579
USAF: Eglin AFB GC (1)	18	1527 Fairway Drive, Niceville, 32578
USAF: Eglin AFB GC (2)	18	1527 Fairway Drive, Niceville, 32578

Total 225

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,455.40	3.99	9.31	9.35	9.40	156	25,482	88.7%	
Domestic S.S. & Small Public S.S.	186.19	0.51				156	3,260	11.3%	
Commercial-Industrial Self-supplied	63.40	0.17	N/A	N/A	N/A				
Recreational Irrigation	131.97	0.36							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,836.96 5.03 28,742 162

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,602.13	4.39	10.24	10.29	10.35	150	29,320	89.2%	
Domestic S.S. & Small Public S.S.	193.80	0.53				150	3,547	10.8%	
Commercial-Industrial Self-supplied	63.40	0.17	N/A	N/A	N/A				
Recreational Irrigation	164.96	0.45							203
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 2,024.29 5.55 32,867 203

2005 Water Use Projection

2000 Water Ose Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,825.94	5.00	11.68	11.73	11.80	154	32,409	91.2%	
Domestic S.S. & Small Public S.S.	177.21	0.49				154	3,145	8.8%	
Commercial-Industrial Self-supplied	63.40	0.17	N/A	N/A	N/A				
Recreational Irrigation	164.96	0.45							203
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 2,231.51 6.11 35,554 203

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,071.01	5.67	13.24	13.30	13.38	165	34,443	90.1%	
Domestic S.S. & Small Public S.S.	228.44	0.63				165	3,799	9.9%	
Commercial-Industrial Self-supplied	63.40	0.17	N/A	N/A	N/A				
Recreational Irrigation	164.96	0.45							203
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	2.527.81	6.93					38.242		203

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,289.64	6.27	14.64	14.70	14.79	166	37,726	92.2%	
Domestic S.S. & Small Public S.S.	194.45	0.53				166	3,204	7.8%	
Commercial-Industrial Self-supplied	63.40	0.17	N/A	N/A	N/A				
Recreational Irrigation	197.95	0.54							243
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	2,745.44	7.52					40,930		243

2020 Water Use Projection

ZOZO Trator Odo i rojodilom									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,554.14	7.00	16.33	16.40	16.50	173	40,363	92.5%	
Domestic S.S. & Small Public S.S.	205.96	0.56				173	3,255	7.5%	
Commercial-Industrial Self-supplied	63.40	0.17	N/A	N/A	N/A				
Recreational Irrigation	197.95	0.54							243
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	3,021.45	8.28					43,618		243

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.99	4.39	5.00	5.67	6.27	7.00
Domestic S.S. & Small Public S.S.	0.51	0.53	0.49	0.63	0.53	0.56
Commercial-Industrial Self-supplied	0.17	0.17	0.17	0.17	0.17	0.17
Recreational Irrigation	0.36	0.45	0.45	0.45	0.54	0.54
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

, ,						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.31	10.24	11.68	13.24	14.64	16.33
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.35	10.29	11.73	13.30	14.70	16.40
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.17	0.17	0.17	0.17	0.17
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.40	10.35	11.80	13.38	14.79	16.50
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.33	2.34	2.36	2.37	2.39
Peak Month	1.62	1.62	1.63	1.62	1.62
Peak 3 Month	1.25	1.25	1.26	1.25	1.25

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020	
Auburn (GEO)	403.70	442.17	517.34	605.30	656.37	740.40	
Baker (LIN)	57.40	66.97	74.40	81.83	89.26	96.69	
Crestview (LIN)	744.60	782.35	873.69	965.03	1,056.38	1,147.72	
Holt (LIN)	32.00	33.71	38.41	43.11	47.81	52.50	
OCWS/Mid-County(GEO)	122.00	166.09	189.84	216.98	248.01	283.47	
Milligan (GEO)	49.30	58.07	75.22	97.44	126.21	163.49	
Laurel Hill (LIN)	46.40	52.77	57.04	61.32	65.60	69.87	
Total	1,455.40	1,602.13	1,825.94	2,071.01	2,289.64	2,554.14	

Public Supply: Projected Average Daily Flow in Mgal/d

	<u> </u>	9				
Year	1995	2000	2005	2010	2015	2020
Auburn (GEO)	1.11	1.21	1.42	1.66	1.80	2.03
Baker (LIN)	0.16	0.18	0.20	0.22	0.24	0.26
Crestview (LIN)	2.04	2.14	2.39	2.64	2.89	3.14
Holt (LIN)	0.09	0.09	0.11	0.12	0.13	0.14
OCWS/Mid-County(GEO)	0.33	0.46	0.52	0.59	0.68	0.78
Milligan (GEO)	0.14	0.16	0.21	0.27	0.35	0.45
Laurel Hill (LIN)	0.13	0.14	0.16	0.17	0.18	0.19
Total	3.99	4.39	5.00	5.67	6.27	7.00

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Auburn	2.48	1.90	1.38
Baker	2.93	1.67	1.22
Crestview	1.50	1.50	1.21
Holt	1.79	1.60	1.25
OCWS/Mid-County	5.65	1.56	1.13
Milligan	2.47	1.38	1.20
Laurel Hill	2.49	1.56	1.38

Public Supply: Projected Maximum Daily Flow in Mgal/d

2000	2005	2010	2015	2020
3.00	3.52	4.11	4.46	5.03
0.54	0.60	0.66	0.72	0.78
3.21	3.59	3.96	4.34	4.71
0.17	0.19	0.21	0.23	0.26
2.57	2.94	3.36	3.84	4.39
0.39	0.51	0.66	0.85	1.11
0.36	0.39	0.42	0.45	0.48
10.24	11.73	13.38	14.89	16.75
	3.00 0.54 3.21 0.17 2.57 0.39 0.36	3.00 3.52 0.54 0.60 3.21 3.59 0.17 0.19 2.57 2.94 0.39 0.51 0.36 0.39	3.00 3.52 4.11 0.54 0.60 0.66 3.21 3.59 3.96 0.17 0.19 0.21 2.57 2.94 3.36 0.39 0.51 0.66 0.36 0.39 0.42	3.00 3.52 4.11 4.46 0.54 0.60 0.66 0.72 3.21 3.59 3.96 4.34 0.17 0.19 0.21 0.23 2.57 2.94 3.36 3.84 0.39 0.51 0.66 0.85 0.36 0.39 0.42 0.45

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Auburn	2.30	2.69	3.15	3.41	3.85
Baker	0.31	0.34	0.37	0.41	0.44
Crestview	3.21	3.59	3.96	4.34	4.71
Holt	0.15	0.17	0.19	0.21	0.23
OCWS/Mid-County	0.71	0.81	0.93	1.06	1.21
Milligan	0.22	0.28	0.37	0.48	0.62
Laurel Hill	0.23	0.24	0.26	0.28	0.30
Total	7.12	8.12	9.23	10.18	11.36

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Auburn	1.67	1.96	2.29	2.48	2.80
Baker	0.22	0.25	0.27	0.30	0.32
Crestview	2.59	2.89	3.19	3.50	3.80
Holt	0.12	0.13	0.15	0.16	0.18
OCWS/Mid-County	0.51	0.59	0.67	0.77	0.88
Milligan	0.19	0.25	0.32	0.41	0.54
Laurel Hill	0.20	0.22	0.23	0.25	0.26
Total	5.50	6.28	7.13	7.87	8.78

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Okaloosa County NonASC-1	89%	91%	90%	92%	93%

Population Served by Utility

Year	2000	2005	2010	2015	2020
Auburn	9,563	10,930	12,296	12,663	13,430
Baker	1,638	1,730	1,823	1,915	2,008
Crestview	10,780	11,108	11,437	11,766	12,095
Holt	1,039	1,123	1,207	1,291	1,375
OCWS/Mid-County	3,297	3,965	4,601	5,207	5,790
Milligan	1,522	1,901	1,257	2,891	3,502
Laurel Hill	1,481	1,652	1,822	1,993	2,163
Total	29,320	32,409	34,443	37,726	40,363

Total Area Population

Year	2000	2005	2010	2015	2020
Population	32,867	35,554	38,242	40,930	43,618

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
FDOC: Okaloosa Corr Facility	63.40	63.40	63.40	63.40	63.40
Total	63.40	63.40	63.40	63.40	63.40

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
FDOC: Okaloosa Corr Facility	0.17	0.17	0.17	0.17	0.17
Total	0.17	0.17	0.17	0.17	0.17

Golf Course Projections

Base Year: 1995			Projected: 2000-2020 Water Use in Mgal						
Total Population	28,742			Total	Number of	Acres	Total G		
Total Number of Holes	36		Year	Population	Holes	Irrigated	Water U		
Holes Per Person	0.0012525		2000	32,867	45	203	164.96		
Total Number Acres Irrigated	162		2005	35,554	45	203	164.96		
Inches Per Acre	30		2010	38,242	45	203	164.96		
Total GC Water Use in Mgal	131.97		2015	40,930	54	243	197.95		
Water Use Per Hole in Mgal	3.67		2020	43,618	54	243	197.95		

Golf Course Name	Holes	Location
Foxwood Country Club	18	Antioch Road, Crestview, 32353
Shoal River GC	18	1100 Shoal River Drive, Crestview, 32536
Total	26	

Total 36

Santa Rosa County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,564.90	12.51	25.80	25.88	25.99	139	90,247	93.9%	
Domestic S.S. & Small Public S.S.	323.30	0.89				152	5,844	6.1%	
Commercial-Industrial Self-supplied	2,263.00	6.20	7.61	7.64	6.93				
Recreational Irrigation	560.87	1.54							689
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	77.02	0.21	N/A	N/A	N/A				N/A

Total 7,789.09 21.34 96,091 689

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,270.71	14.44	29.74	29.83	29.95	130	110,805	93.6%	
Domestic S.S. & Small Public S.S.	380.80	1.04				137	7,607	6.4%	
Commercial-Industrial Self-supplied	2,263.00	6.20	7.61	7.64	6.93				
Recreational Irrigation	692.83	1.90							851
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	124.47	0.34	N/A	0.60	0.53				97

Total 8,731.81 23.92 118,412 948

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	6,018.68	16.49	33.94	34.05	34.19	139	118,511	93.9%	
Domestic S.S. & Small Public S.S.	390.15	1.07				140	7,653	6.1%	
Commercial-Industrial Self-supplied	2,445.50	6.70	8.27	8.30	7.52				
Recreational Irrigation	758.82	2.08							932
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	132.86	0.36	N/A	0.64	0.57				105

Total 9,746.01 26.70 126,164 1,037

Santa Rosa County Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	6,792.93	18.61	38.29	38.41	38.57	142	130,912	96.4%	
Domestic S.S. & Small Public S.S.	253.60	0.69				143	4,858	3.6%	
Commercial-Industrial Self-supplied	2,628.00	7.20	8.94	8.96	8.11				
Recreational Irrigation	824.80	2.26							1,013
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	146.37	0.40	N/A	0.71	0.62				116
Total	10,645.70	29.17					135,770		1,129

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	7,566.28	20.73	42.64	42.78	42.96	145	143,353	96.0%	
Domestic S.S. & Small Public S.S.	315.45	0.86				145	5,948	4.0%	
Commercial-Industrial Self-supplied	2,810.50	7.70	9.60	9.62	8.70				
Recreational Irrigation	890.79	2.44							1,094
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	156.95	0.43	N/A	0.76	0.67				126
Total	11,739.97	32.16					149,300		1,220

2020 Water Use Projection

	Average	Maximum	Peak	Peak 3				Total
Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
8,292.00	22.72	46.71	46.86	47.06	146	155,826	95.9%	
355.46	0.97				146	6,649	4.1%	
2,993.00	8.20	10.27	10.28	9.29				
956.77	2.62							1,175
0.00	0.00	0.00	0.00	0.00				
171.19	0.47	N/A	0.82	0.64				135
	in Mgal 8,292.00 355.46 2,993.00 956.77 0.00	Total Flow in Mgal in Mgal/d 8,292.00 22.72 355.46 0.97 2,993.00 8.20 956.77 2.62 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d in Mgal/d Daily Flow in Mgal/d 8,292.00 22.72 46.71 355.46 0.97 2,993.00 8.20 10.27 956.77 2.62 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d in Mgal/d in Mgal/d in Mgal/d in Mgal/d Daily Flow in Mgal/d in Mgal/d in Mgal/d in Mgal/d 8,292.00 22.72 46.71 46.86 355.46 0.97	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d 8,292.00 22.72 46.71 46.86 47.06 355.46 0.97	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d 8,292.00 22.72 46.71 46.86 47.06 146 355.46 0.97 10.27 10.28 9.29 956.77 2.62 0.00 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d Population Served 8,292.00 22.72 46.71 46.86 47.06 146 155,826 355.46 0.97 146 6,649 2,993.00 8.20 10.27 10.28 9.29 956.77 2.62 2.62 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Per Capita in Mgal/d Population Served Percent Population Served 8,292.00 22.72 46.71 46.86 47.06 146 155,826 95.9% 355.46 0.97 50.27 146 6,649 4.1% 2,993.00 8.20 10.27 10.28 9.29 50.29 50.29 956.77 2.62 50.00 0.00 0.00 0.00 0.00 0.00 0.00

Total 12,768.42 34.98 162,475 1,310

Santa Rosa County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	12.51	14.44	16.49	18.61	20.73	22.72
Domestic S.S. & Small Public S.S.	0.89	1.04	1.07	0.69	0.86	0.97
Commercial-Industrial Self-supplied	6.20	6.20	6.70	7.20	7.70	8.20
Recreational Irrigation	1.54	1.90	2.08	2.26	2.44	2.62
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.21	0.34	0.36	0.40	0.43	0.47

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	25.80	29.74	33.94	38.29	42.64	46.71
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	7.61	7.61	8.27	8.94	9.60	10.27
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	25.88	29.83	34.05	38.41	42.78	46.86
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	7.64	7.64	8.30	8.96	9.62	10.28
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.60	0.64	0.71	0.76	0.82

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	25.99	29.95	34.19	38.57	42.96	47.06
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	6.93	6.93	7.52	8.11	8.70	9.29
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.53	0.57	0.62	0.67	0.64

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,843.20	5.05	9.70	9.79	9.85	166	30,432	88.9%	
Domestic S.S. & Small Public S.S.	230.70	0.63				166	3,809	11.1%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	263.94	0.72							324
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 2,337.84 6.41 34,241 324

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,213.84	6.07	11.65	11.76	11.84	144	42,120	88.9%	
Domestic S.S. & Small Public S.S.	275.67	0.76				144	5,245	11.1%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	362.91	0.99							446
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 2,852.42 7.81 47,365 446

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,560.03	7.01	13.47	13.59	13.69	149	47,164	93.5%	
Domestic S.S. & Small Public S.S.	179.21	0.49				149	3,302	6.5%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	395.91	1.08							486
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 3,135.14 8.59 50,466 486

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,906.23	7.96	15.30	15.43	15.54	153	52,135	96.0%	
Domestic S.S. & Small Public S.S.	121.13	0.33				153	2,173	4.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	428.90	1.18							527
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	3,456.25	9.47					54,308		527

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,251.88	8.91	17.12	17.27	17.38	156	57,127	95.7%	
Domestic S.S. & Small Public S.S.	147.63	0.40				156	2,594	4.3%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	461.89	1.27							567
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	3,861.41	10.58					59,720		567

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,597.52	9.86	18.93	19.10	19.23	159	62,128	95.6%	
Domestic S.S. & Small Public S.S.	165.72	0.45				159	2,862	4.4%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	494.88	1.36							608
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 4,258.13 11.67 64,990 608

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.05	6.07	7.01	7.96	8.91	9.86
Domestic S.S. & Small Public S.S.	0.63	0.76	0.49	0.33	0.40	0.45
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.72	0.99	1.08	1.18	1.27	1.36
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.70	11.65	13.47	15.30	17.12	18.93
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.79	11.76	13.59	15.43	17.27	19.10
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.85	11.84	13.69	15.54	17.38	19.23
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.92	1.94	1.95	1.96	1.97
Peak Month	1.39	1.39	1.39	1.39	1.39
Peak 3 Month	1.27	1.28	1.28	1.28	1.28

Public Supply: Projected Annual Flow in Mgal/yr

		,,				
Year	1995	2000	2005	2010	2015	2020
Gulf Breeze (LIN)	289.30	326.83	346.80	366.76	386.72	406.69
Holley Navarre (LIN)	538.80	689.19	857.69	1,026.20	1,194.71	1,363.21
Midway (LIN)	628.30	705.83	815.09	924.35	1,033.61	1,142.86
Navarre Beach (UTIL)	97.50	133.96	140.16	146.37	152.02	157.68
South Santa Rosa (LIN)	289.30	358.03	400.29	442.55	484.82	527.08
Total	1,843.20	2,213.84	2,560.03	2,906.23	3,251.88	3,597.52

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Gulf Breeze (LIN)	0.79	0.90	0.95	1.00	1.06	1.11
Holley Navarre (LIN)	1.48	1.89	2.35	2.81	3.27	3.73
Midway (LIN)	1.72	1.93	2.23	2.53	2.83	3.13
Navarre Beach (UTIL)	0.27	0.37	0.38	0.40	0.42	0.43
South Santa Rosa (LIN)	0.79	0.98	1.10	1.21	1.33	1.44
Total	5.05	6.07	7.01	7.96	8.91	9.86

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Gulf Breeze	1.73	1.43	1.29
Holley Navarre	2.39	1.41	1.28
Midway	1.87	1.40	1.30
Navarre Beach	1.84	1.33	1.21
South Santa Rosa	1.32	1.32	1.23

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Gulf Breeze	1.55	1.64	1.74	1.83	1.93
Holley Navarre	4.51	5.62	6.72	7.82	8.93
Midway	3.62	4.18	4.74	5.30	5.86
Navarre Beach	0.68	0.71	0.74	0.77	0.79
South Santa Rosa	1.30	1.45	1.61	1.76	1.91
Total	11.65	13.59	15.54	17.48	19.42

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Gulf Breeze	1.28	1.36	1.44	1.52	1.60
Holley Navarre	2.65	3.30	3.95	4.60	5.25
Midway	2.71	3.13	3.55	3.97	4.39
Navarre Beach	0.49	0.51	0.53	0.55	0.57
South Santa Rosa	1.30	1.45	1.61	1.76	1.91
Total	8.44	9.76	11.09	12.41	13.73

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Gulf Breeze	1.16	1.23	1.30	1.37	1.44
Holley Navarre	2.41	3.00	3.59	4.18	4.77
Midway	2.51	2.89	3.28	3.67	4.06
Navarre Beach	0.44	0.46	0.49	0.50	0.52
South Santa Rosa	1.21	1.35	1.49	1.64	1.78
Total	7.73	8.94	10.16	11.37	12.58

Percent Served by Public Supply

T Groom Corvoa by T abile Capp	.,				
Year	2000	2005	2010	2015	2020
Santa Rosa County ASC-1	89%	93%	96%	96%	96%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Gulf Breeze	6,228	6,519	6,824	7,143	7,477
Holley Navarre	11,732	13,980	16,228	18,475	20,723
Midway	11,418	13,567	15,717	17,867	20,017
Navarre Beach	3,643	3,880	4,117	4,385	4,652
South Santa Rosa	9,099	9,218	9,249	9,257	9,259
Total	42,120	47,164	52,135	57,127	62,128

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	40%	40%	40%	40%	40%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	47,365	50,466	54,308	59,720	64,990

Golf Course Projections

Base Year: 1995			Projected: 2000-2020 Water Use in Mgal						
Total Population	34,241			Total	Number of	Acres	Total GC		
Total Number of Holes	72		Year	Population	Holes	Irrigated	Water Use		
Holes Per Person	0.0021027		2000	47,365	99	446	362.91		
Total Number Acres Irrigated	324		2005	50,466	108	486	395.91		
Inches Per Acre	30		2010	54,308	117	527	428.90		
Total GC Water Use in Mgal	263.94		2015	59,720	126	567	461.89		
Water Use Per Hole in Mgal	3.67		2020	64,990	135	608	494.88		

Golf Course Name Holes Location	วท
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Club at Hidden Creek, The	18	3070 PGA Blvd., Navarre, 32566
Santa Rosa Golf & Beach Club	18	Highway 30A, Santa Rosa Beach, 32459
Tiger Point Golf & CC (1)	18	1255 Country Club Road, Gulf Breeze, 32561
Tiger Point Golf & CC (2)	18	1255 Country Club Road, Gulf Breeze, 32561

Total 72

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,721.70	7.46	16.10	16.09	16.13	125	59,815	96.7%	
Domestic S.S. & Small Public S.S.	92.60	0.25				125	2,035	3.3%	
Commercial-Industrial Self-supplied	2,263.00	6.20	7.61	7.64	6.93				
Recreational Irrigation	296.93	0.81							365
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 5,374.23 14.72 61,850 365

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,056.87	8.37	18.08	18.08	18.12	122	68,685	96.7%	
Domestic S.S. & Small Public S.S.	105.13	0.29				122	2,362	3.3%	
Commercial-Industrial Self-supplied	2,263.00	6.20	7.61	7.64	6.93				
Recreational Irrigation	329.92	0.90							405
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 5,754.92 15.77 71,047 405

2005 Water Use Projection

2000 Water Ode Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,458.65	9.48	20.46	20.45	20.50	133	71,347	94.3%	
Domestic S.S. & Small Public S.S.	210.94	0.58				133	4,351	5.7%	
Commercial-Industrial Self-supplied	2,445.50	6.70	8.27	8.30	7.52				
Recreational Irrigation	362.91	0.99							446
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 6,478.00 17.75 75,698 446

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,886.70	10.65	22.99	22.98	23.04	135	78,777	96.7%	
Domestic S.S. & Small Public S.S.	132.47	0.36				135	2,685	3.3%	
Commercial-Industrial Self-supplied	2,628.00	7.20	8.94	8.96	8.11				
Recreational Irrigation	395.91	1.08							486
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	7,043.08	19.30					81,462		486

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,314.40	11.82	25.52	25.51	25.57	137	86,226	96.3%	
Domestic S.S. & Small Public S.S.	167.82	0.46				137	3,354	3.7%	
Commercial-Industrial Self-supplied	2,810.50	7.70	9.60	9.62	8.70				
Recreational Irrigation	428.90	1.18							527
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	7,721.62	21.16					89,580		527

2020 Water Use Projection

2020 Trator Oco i Tojootion									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,694.48	12.86	27.77	27.76	27.82	137	93,698	96.1%	
Domestic S.S. & Small Public S.S.	189.74	0.52				137	3,787	3.9%	
Commercial-Industrial Self-supplied	2,993.00	8.20	10.27	10.28	9.29				
Recreational Irrigation	461.89	1.27							567
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	8,339.11	22.85					97,485		567

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	7.46	8.37	9.48	10.65	11.82	12.86
Domestic S.S. & Small Public S.S.	0.25	0.29	0.58	0.36	0.46	0.52
Commercial-Industrial Self-supplied	6.20	6.20	6.70	7.20	7.70	8.20
Recreational Irrigation	0.81	0.90	0.99	1.08	1.18	1.27
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	16.10	18.08	20.46	22.99	25.52	27.77
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	7.61	7.61	8.27	8.94	9.60	10.27
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	16.09	18.08	20.45	22.98	25.51	27.76
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	7.64	7.64	8.30	8.96	9.62	10.28
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	16.13	18.12	20.50	23.04	25.57	27.82
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	6.93	6.93	7.52	8.11	8.70	9.29
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.16	2.16	2.16	2.17	2.17
Peak Month	1.61	1.61	1.62	1.62	1.62
Peak 3 Month	1.32	1.32	1.32	1.32	1.32

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Bagdad/Garron (LIN)	142.10	163.76	186.40	209.04	231.68	254.32
Berrydale (LIN)	78.30	91.66	108.09	124.52	140.94	157.37
Chumuckula (GEO)	99.30	104.96	125.80	150.77	180.69	158.16
East Milton (LIN)	279.90	352.74	433.78	514.82	595.86	676.90
Jay (LOG)	101.50	100.09	100.18	100.19	100.19	100.19
Milton (LIN)	724.00	756.03	807.55	859.07	910.59	962.10
Moore Cree/Mt Carmel (GEO)	111.40	120.77	131.99	165.42	193.59	226.57
Pace (LIN)	944.50	1,080.75	1,237.46	1,394.17	1,550.87	1,707.58
Point Baker (LIN)	240.70	286.11	327.40	368.70	409.99	451.29
Total	2,721.70	3,056.87	3,458.65	3,886.70	4,314.40	4,694.48

Public Supply: Projected Average Daily Flow in Mgal/d

		3				
Year	1995	2000	2005	2010	2015	2020
Bagdad/Garron (LIN)	0.39	0.45	0.51	0.57	0.63	0.70
Berrydale (LIN)	0.21	0.25	0.30	0.34	0.39	0.43
Chumuckula (GEO)	0.27	0.29	0.34	0.41	0.50	0.43
East Milton (LIN)	0.77	0.97	1.19	1.41	1.63	1.85
Jay (LOG)	0.28	0.27	0.27	0.27	0.27	0.27
Milton (LIN)	1.98	2.07	2.21	2.35	2.49	2.64
Moore Cree/Mt Carmel (GEO)	0.31	0.33	0.36	0.45	0.53	0.62
Pace (LIN)	2.59	2.96	3.39	3.82	4.25	4.68
Point Baker (LIN)	0.66	0.78	0.90	1.01	1.12	1.24
Total	7.46	8.37	9.48	10.65	11.82	12.86

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Bagdad/Garron	2.19	1.63	1.40
Berrydale	2.25	1.35	1.26
Chumuckula	2.39	1.40	1.22
East Milton	2.19	1.48	1.28
Jay	2.36	1.32	1.19
Milton	2.11	1.51	1.26
Moore Cree/Mt Carmel	3.18	1.92	1.38
Pace	1.99	1.74	1.37
Point Baker	2.26	1.71	1.36

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Bagdad/Garron	0.98	1.12	1.25	1.39	1.53
Berrydale	0.57	0.67	0.77	0.87	0.97
Chumuckula	0.69	0.82	0.99	1.18	1.04
East Milton	2.12	2.60	3.09	3.58	4.06
Jay	0.65	0.65	0.65	0.65	0.65
Milton	4.37	4.67	4.97	5.26	5.56
Moore Cree/Mt Carmel	1.05	1.15	1.44	1.69	1.97
Pace	5.89	6.75	7.60	8.46	9.31
Point Baker	1.77	2.03	2.28	2.54	2.79
Total	18.08	20.45	23.04	25.61	27.88

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bagdad/Garron	0.73	0.83	0.93	1.04	1.14
Berrydale	0.34	0.40	0.46	0.52	0.58
Chumuckula	0.40	0.48	0.58	0.69	0.60
East Milton	1.43	1.75	2.08	2.41	2.74
Jay	0.36	0.36	0.36	0.36	0.36
Milton	3.13	3.34	3.56	3.77	3.98
Moore Cree/Mt Carmel	0.64	0.70	0.87	1.02	1.19
Pace	5.14	5.89	6.63	7.38	8.12
Point Baker	1.34	1.54	1.73	1.92	2.12
Total	13.51	15.29	17.20	19.11	20.84

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bagdad/Garron	0.63	0.71	0.80	0.89	0.97
Berrydale	0.32	0.37	0.43	0.49	0.54
Chumuckula	0.35	0.42	0.50	0.60	0.53
East Milton	1.23	1.52	1.80	2.08	2.36
Jay	0.33	0.33	0.33	0.33	0.33
Milton	2.61	2.79	2.97	3.14	3.32
Moore Cree/Mt Carmel	0.46	0.50	0.62	0.73	0.85
Pace	4.04	4.63	5.22	5.80	6.39
Point Baker	1.06	1.22	1.37	1.53	1.68
Total	11.02	12.48	14.03	15.58	16.98

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Santa Rosa County NonASC-1	97%	94%	97%	96%	96%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Bagdad/Garron	4,229	4,703	5,178	5,652	6,127
Berrydale	1,753	1,928	2,120	2,331	2,563
Chumuckula	2,609	2,956	3,303	3,650	3,996
East Milton	6,615	7,376	8,137	8,898	9,660
Jay	6,228	1,476	1,475	1,475	1,474
Milton	15,986	17,429	18,871	20,314	21,757
Moore Cree/Mt Carmel	2,666	2,812	2,959	3,105	3,252
Pace	22,241	25,372	28,502	31,632	34,763
Point Baker	6,358	7,295	8,232	9,169	10,106
Total	68,685	71,347	78,777	86,226	93,698

Total Area Population

Total 7 il od 1 opulation					
Year	2000	2005	2010	2015	2020
Population	71,047	75,698	81,462	89,580	97,485

Golf Course Projections

Base Year: 1995	ase Year: 1995		Projected: 2000-2020 Water Use in Mgal					
Total Population	61,850			Total	Number of	Acres	Total GC	
Total Number of Holes	81		Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0013096		2000	71,047	90	405	329.92	
Total Number Acres Irrigated	365		2005	75,698	99	446	362.91	
Inches Per Acre	30		2010	81,462	108	486	395.91	
Total GC Water Use in Mgal	296.93		2015	89,580	117	527	428.90	
Water Use Per Hole in Mgal	3.67		2020	97,485	126	567	461.89	

The Moors GC	18	Milton
Tanglewood Golf & CC	18	Tanglewood Drive, Milton, 32570
Stonebrook Village Golf Center	27	3200 Coblestone Drive, Pace, 32571
US Navy: Whiting Field Navy G	18	MWR Dept. Bldg. 2895 WFN Golf Course, Milton, 32570

Total 81

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Cytec/Sterling Fibers	1095.00	1277.50	1460.00	1642.50	1825.00
Air Products	1168.00	1168.00	1168.00	1168.00	1168.00
Total	2263.00	2445.50	2628.00	2810.50	2993.00

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Cytec/Sterling Fibers	3.00	3.50	4.00	4.50	5.00
Air Products	3.20	3.20	3.20	3.20	3.20
Total	6.20	6.70	7.20	7.70	8.20

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Cytec/Sterling Fibers	1.33	1.32	1.18
Air Products	1.13	1.15	1.06
Total	2.46	2.47	2.24

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Cytec/Sterling Fibers	3.99	4.66	5.32	5.99	6.65
Air Products	3.62	3.62	3.62	3.62	3.62
Total	7.61	8.27	8.94	9.60	10.27

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Cytec/Sterling Fibers	3.96	4.62	5.28	5.94	6.60
Air Products	3.68	3.68	3.68	3.68	3.68
Total	7.64	8.30	8.96	9.62	10.28

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Cytec/Sterling Fibers	3.54	4.13	4.72	5.31	5.90
Air Products	3.39	3.39	3.39	3.39	3.39
Total	6.93	7.52	8.11	8.70	9.29

Walton County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,588.65	4.35	7.54	7.54	7.55	146	29,799	89.2%	
Domestic S.S. & Small Public S.S.	188.85	0.52				143	3,616	10.8%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	461.89	1.27							567
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	18.98	0.05	N/A	N/A	N/A				N/A

Total 2,842.37 7.79 33,415 567

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,862.98	5.10	8.85	8.86	8.87	161	31,788	89.5%	
Domestic S.S. & Small Public S.S.	217.98	0.60				160	3,732	10.5%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	494.88	1.36							608
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	16.73	0.05	N/A	0.12	0.10				41

Total 3,176.57 8.70 35,520 649

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,119.46	5.81	10.09	10.10	10.11	167	34,680	90.2%	
Domestic S.S. & Small Public S.S.	230.17	0.63				167	3,771	9.8%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	527.87	1.45							648
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	17.16	0.05	N/A	0.12	0.10				41

Total 3,478.67 9.53 38,451 689

Walton County Summary

2010 Water Use Projection

·		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,371.97	6.50	11.31	11.32	11.33	174	37,353	89.8%	
Domestic S.S. & Small Public S.S.	264.78	0.73				171	4,242	10.2%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	560.87	1.54							689
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	18.62	0.05	N/A	0.13	0.10				42
Total	3,800.24	10.41					41,595		731

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,627.23	7.20	12.54	12.55	12.56	180	39,880	88.2%	
Domestic S.S. & Small Public S.S.	336.99	0.92				174	5,317	11.8%	
Commercial-Industrial Self-supplied	602.25	1.65	4.29	2.08	1.88				
Recreational Irrigation	626.85	1.72							770
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	19.71	0.05	N/A	0.13	0.11				44
Total	4,213.03	11.54					45,197		814

2020 Water Use Projection

	Average	Maximum	Peak	Peak 3				Total
Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
2,886.12	7.91	13.79	13.80	13.82	187	42,310	84.1%	
519.02	1.42				178	7,999	15.9%	
625.50	1.71	4.46	2.16	1.95				
692.83	1.90							851
0.00	0.00	0.00	0.00	0.00				
21.90	0.06	N/A	0.15	0.12				50
	in Mgal 2,886.12 519.02 625.50 692.83 0.00	Total Flow in Mgal in Mgal/d 2,886.12 7.91 519.02 1.42 625.50 1.71 692.83 1.90 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d in Mgal/d Daily Flow in Mgal/d 2,886.12 7.91 13.79 519.02 1.42 625.50 1.71 4.46 692.83 1.90 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d in Mgal/d in Mgal/d in Mgal/d in Mgal/d Daily Flow in Mgal/d in Mgal/	Total Flow in Mgal Daily Flow in Mgal/d in Mga	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d 2,886.12 7.91 13.79 13.80 13.82 187 519.02 1.42 178 178 625.50 1.71 4.46 2.16 1.95 692.83 1.90 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d Population Served 2,886.12 7.91 13.79 13.80 13.82 187 42,310 519.02 1.42 178 7,999 625.50 1.71 4.46 2.16 1.95 692.83 1.90 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in Mgal/d Population Served Percent Population Served 2,886.12 7.91 13.79 13.80 13.82 187 42,310 84.1% 519.02 1.42 178 7,999 15.9% 625.50 1.71 4.46 2.16 1.95 1.95 1.90 692.83 1.90 0.00 0.00 0.00 0.00 0.00 0.00

Total 4,745.37 13.00 50,309 901

Walton County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	4.35	5.10	5.81	6.50	7.20	7.91
Domestic S.S. & Small Public S.S.	0.52	0.60	0.63	0.73	0.92	1.42
Commercial-Industrial Self-supplied	1.60	1.60	1.60	1.60	1.65	1.71
Recreational Irrigation	1.27	1.36	1.45	1.54	1.72	1.90
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.05	0.05	0.05	0.05	0.05	0.06

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	7.54	8.85	10.09	11.31	12.54	13.79
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	4.16	4.16	4.16	4.16	4.29	4.46
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	7.54	8.86	10.10	11.32	12.55	13.80
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	2.02	2.02	2.02	2.02	2.08	2.16
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.12	0.12	0.13	0.13	0.15

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	7.55	8.87	10.11	11.33	12.56	13.82
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	1.82	1.82	1.82	1.82	1.88	1.95
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.10	0.10	0.10	0.11	0.12

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,098.25	3.01	5.31	5.31	5.32	138	21,865	88.0%	
Domestic S.S. & Small Public S.S.	150.28	0.41				138	2,992	12.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	461.89	1.27							567
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,710.42 4.69 24,857 567

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,328.21	3.64	6.42	6.42	6.43	158	22,999	88.7%	
Domestic S.S. & Small Public S.S.	169.22	0.46				158	2,930	11.3%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	494.88	1.36							608
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,992.31 5.46 25,930 608

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,572.96	4.31	7.60	7.61	7.62	168	25,640	91.3%	
Domestic S.S. & Small Public S.S.	149.06	0.41				168	2,430	8.7%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	527.87	1.45							648
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 2,249.89 6.16 28,069 648

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,818.21	4.98	8.79	8.79	8.81	178	28,051	92.4%	
Domestic S.S. & Small Public S.S.	149.97	0.41				178	2,314	7.6%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	560.87	1.54							689
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	2,529.04	6.93					30,364		689

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,068.02	5.67	10.00	10.00	10.02	187	30,295	91.8%	
Domestic S.S. & Small Public S.S.	184.24	0.50				187	2,699	8.2%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	626.85	1.72							770
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	2,879.11	7.89					32,994		770

2020 Water Use Projection

	Maximum	Peak	Peak 3				Total
Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
6.36	11.22	11.23	11.25	196	32,417	88.3%	
0.85				196	4,308	11.7%	
0.00	0.00	0.00	0.00				
1.90							851
0.00	0.00	0.00	0.00				
N/A	N/A	N/A	N/A				N/A
				N/A N/A N/A N/A			

Total 3,323.59 9.11 36,726 851

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.01	3.64	4.31	4.98	5.67	6.36
Domestic S.S. & Small Public S.S.	0.41	0.46	0.41	0.41	0.50	0.85
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	1.27	1.36	1.45	1.54	1.72	1.90
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

maximum 2 amy 1 to 11 mm gan, a						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.31	6.42	7.60	8.79	10.00	11.22
Domestic S.S. & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.31	6.42	7.61	8.79	10.00	11.23
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.32	6.43	7.62	8.81	10.02	11.25
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.76	1.77	1.77	1.77	1.78
Peak Month	1.53	1.52	1.52	1.52	1.52
Peak 3 Month	1.38	1.38	1.38	1.38	1.38

Public Supply: Projected Annual Flow in Mgal/yr

Yea	ar 1995	2000	2005	2010	2015	2020
Freeport (LIN)	106.80	116.48	142.31	168.14	193.97	219.80
Inlet Beach (GEO)	25.10	33.00	42.29	54.19	69.43	88.97
Regional Utilties (LIN)	264.25	388.16	488.21	588.25	688.29	788.33
Smith Water Co. (GEO)	45.50	48.00	52.71	55.32	59.15	62.98
South Walton (LIN)	656.60	742.57	847.44	952.31	1,057.18	1,162.05
Tot	al 1,098.25	1,328.21	1,572.96	1,818.21	2,068.02	2,322.13

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Freeport (LIN)	0.29	0.32	0.39	0.46	0.53	0.60
Inlet Beach (GEO)	0.07	0.09	0.12	0.15	0.19	0.24
Regional Utilties (LIN)	0.72	1.06	1.34	1.61	1.89	2.16
Smith Water Co. (GEO)	0.12	0.13	0.14	0.15	0.16	0.17
South Walton (LIN)	1.80	2.03	2.32	2.61	2.90	3.18
Total	3.01	3.64	4.31	4.98	5.67	6.36

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Freeport	1.56	1.56	1.29
Inlet Beach	3.39	2.00	1.67
Regional Utilities	1.71	1.41	1.35
Smith Water Co.	2.43	2.58	1.40
South Walton	1.71	1.49	1.40

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Freeport	0.50	0.61	0.72	0.83	0.94
Inlet Beach	0.31	0.39	0.50	0.64	0.83
Regional Utilities	1.82	2.29	2.76	3.22	3.69
Smith Water Co.	0.32	0.35	0.37	0.39	0.42
South Walton	3.48	3.97	4.46	4.95	5.44
Total	6.42	7.61	8.81	10.04	11.32

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Freeport	0.50	0.61	0.72	0.83	0.94
Inlet Beach	0.18	0.23	0.30	0.38	0.49
Regional Utilities	1.50	1.89	2.27	2.66	3.05
Smith Water Co.	0.34	0.37	0.39	0.42	0.44
South Walton	3.04	3.47	3.90	4.32	4.75
Total	5.55	6.56	7.57	8.61	9.67

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Freeport	0.41	0.50	0.60	0.69	0.78
Inlet Beach	0.15	0.19	0.25	0.32	0.41
Regional Utilities	1.44	1.81	2.18	2.55	2.92
Smith Water Co.	0.18	0.20	0.21	0.23	0.24
South Walton	2.85	3.26	3.66	4.06	4.47
Total	5.04	5.96	6.89	7.84	8.81

Percent Served by Public Supply

T Groom Corvoa by T abile Capp	<u>'y</u>				
Year	2000	2005	2010	2015	2020
Walton County ASC-1	89%	91%	92%	92%	88%

Population Served by Utility

Year	2000	2005	2010	2015	2020
Freeport	1,082	1,279	1,529	1,833	2,190
Inlet Beach	1,018	1,153	1,288	1,423	1,558
Regional Utilities	4,634	5,454	6,273	7,092	7,911
Smith Water Co.	1,502	1,680	1,858	2,037	2,215
South Walton	14,763	16,074	17,103	17,910	18,543
Total	22,999	25,640	28,051	30,295	32,417

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent		73%	73%	73%	73%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	25,930	28,069	30,364	32,994	36,726

Golf Course Projections

Base Year: 1995		Projected: 2000-2020 Water Use in Mgal				
Total Population	24,857		Total	Number of	Acres	Total GC
Total Number of Holes	126	Year	Population	Holes	Irrigated	Water Use
Holes Per Person	0.0050690	2000	25,930	135	608	494.88
Total Number Acres Irrigated	567	2005	28,069	144	648	527.87
Inches Per Acre	30	2010	30,364	153	689	560.87
Total GC Water Use in Mgal	461.89	2015	32,994	171	770	626.85
Water Use Per Hole in Mgal	3.67	2020	36,726	189	851	692.83

Golf Course Name	Holes	Location
D.I. Development	18	
Garden of Destin, The	9	40091 Emerald Coast Parkway, Destin, 32541
Sandestin Resort Golf Club (1)	18	5500 Highway 98 East, Destin, 32541
Sandestin Resort Golf Club (2)	18	5500 Highway 98 East, Destin, 32541
Sandestin Resort Golf Club (3)	9	5500 Highway 98 East, Destin, 32541
Sandestin Owners Association	18	5500 Highway 98 East, Destin, 32541
Seascape Resort, Inc.	18	100 Seascape Drive, Destin, 32541
Santa Rosa Golf & Bch Club, In	18	Highway 30A, Santa Rosa Beach, 32459

Total 120

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	490.40	1.34	2.23	2.23	2.23	169	7,934	92.7%	
Domestic S.S. & Small Public S.S.	38.57	0.11				169	624	7.3%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,112.97 3.05 8,558 0

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	534.77	1.47	2.43	2.44	2.44	167	8,789	91.6%	
Domestic S.S. & Small Public S.S.	48.76	0.13				167	801	8.4%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	0.00	0.00							0.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,167.53 3.20 9,590 0

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	546.50	1.50	2.49	2.49	2.49	166	9,040	87.1%	
Domestic S.S. & Small Public S.S.	81.11	0.22				166	1,342	12.9%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	0.00	0.00							0.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,211.61 3.32 10,382 0

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	553.76	1.52	2.52	2.52	2.52	163	9,302	82.8%	
Domestic S.S. & Small Public S.S.	114.82	0.31				163	1,929	17.2%	
Commercial-Industrial Self-supplied	584.00	1.60	4.16	2.02	1.82				
Recreational Irrigation	0.00	0.00							0.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,252.58	3.43					11,231		0

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	559.21	1.53	2.54	2.55	2.55	160	9,585	78.5%	
Domestic S.S. & Small Public S.S.	152.75	0.42				160	2,618	21.5%	
Commercial-Industrial Self-supplied	602.25	1.65	4.29	2.08	1.88				
Recreational Irrigation	0.00	0.00							0.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,314.21	3.60					12,203		0

2020 Water Use Projection

2020 Trator Oco i rojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	563.99	1.55	2.57	2.57	2.57	156	9,893	72.8%	
Domestic S.S. & Small Public S.S.	210.39	0.58				156	3,690	27.2%	
Commercial-Industrial Self-supplied	625.50	1.71	4.46	2.16	1.95				
Recreational Irrigation	0.00	0.00							0.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,399.88	3.84		•		•	13,583	·	0

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.34	1.47	1.50	1.52	1.53	1.55
Domestic S.S. & Small Public S.S.	0.11	0.13	0.22	0.31	0.42	0.58
Commercial-Industrial Self-supplied	1.60	1.60	1.60	1.60	1.65	1.71
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

marani 2 any i ion ni mgara									
Use Category	1995	2000	2005	2010	2015	2020			
Public Supply	2.23	2.43	2.49	2.52	2.54	2.57			
Domestic S.S. & Small Public S.S.		-	-	-	-	-			
Commercial-Industrial Self-supplied	4.16	4.16	4.16	4.16	4.29	4.46			
Recreational Irrigation									
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00			
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A			

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.23	2.44	2.49	2.52	2.55	2.57
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	2.02	2.02	2.02	2.02	2.08	2.16
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.23	2.44	2.49	2.52	2.55	2.57
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	1.82	1.82	1.82	1.82	1.88	1.95
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.66	1.66	1.66	1.66	1.67
Peak Month	1.66	1.66	1.66	1.66	1.66
Peak 3 Month	1.54	1.54	1.54	1.54	1.54

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Argyle (GEO)	22.50	27.45	27.89	28.35	28.81	29.28
DeFuniak Springs (LOG)	364.70	405.42	412.84	415.76	416.88	417.31
Mossy Head (LIN)	30.90	35.80	40.14	44.49	48.83	53.17
Paxton (LIN)	72.30	66.10	65.63	65.16	64.69	64.23
Total	490.40	534.77	546.50	553.76	559.21	563.99

Public Supply: Projected Average Daily Flow in Mgal/d

	<u> </u>					
Year	1995	2000	2005	2010	2015	2020
Argyle (GEO)	0.06	0.08	0.08	0.08	0.08	0.08
DeFuniak Springs (LOG)	1.00	1.11	1.13	1.14	1.14	1.14
Mossy Head (LIN)	0.08	0.10	0.11	0.12	0.13	0.15
Paxton (LIN)	0.20	0.18	0.18	0.18	0.18	0.18
Total	1.34	1.47	1.50	1.52	1.53	1.55

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Argyle	1.76	1.67	1.56
DeFuniak Springs	1.65	1.65	1.58
Mossy Head	1.78	1.78	1.33
Paxton	1.60	1.60	1.44

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Argyle	0.13	0.13	0.14	0.14	0.14
DeFuniak Springs	1.84	1.87	1.88	1.89	1.89
Mossy Head	0.17	0.20	0.22	0.24	0.26
Paxton	0.29	0.29	0.29	0.28	0.28
Total	2.43	2.49	2.52	2.55	2.57

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Argyle	0.13	0.13	0.13	0.13	0.13
DeFuniak Springs	1.84	1.87	1.88	1.89	1.89
Mossy Head	0.17	0.20	0.22	0.24	0.26
Paxton	0.29	0.29	0.29	0.28	0.28
Total	2.43	2.48	2.52	2.54	2.57

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Argyle	0.12	0.12	0.12	0.12	0.12
DeFuniak Springs	1.75	1.79	1.80	1.80	1.81
Mossy Head	0.13	0.15	0.16	0.18	0.19
Paxton	0.26	0.26	0.26	0.25	0.25
Total	2.26	2.31	2.34	2.36	2.38

Percent Served by Public Supply

Vacr	2000	2005	2040	2015	2020
Year	2000	2005	2010	2015	2020
Walton County NonASC-1	92%	87%	83%	79%	73%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Argyle	687	691	693	701	715
DeFuniak Springs	5,514	5,566	5,618	5,671	5,724
Mossy Head	914	1,024	1,148	1,286	1,442
Paxton	1,674	1,759	1,843	1,927	2,012
Total	8,789	9,040	9,302	9,585	9,893

Total Area Population

Year	2000	2005	2010	2015	2020
Population	9,590	10,382	11,231	12,203	13,583

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Perdue Farms	584.00	584.00	584.00	602.25	625.50
Total	584.00	584.00	584.00	602.25	625.50

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Perdue Farms	1.60	1.60	1.60	1.65	1.71
Total	1.60	1.60	1.60	1.65	1.71

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Perdue Farms	2.60	1.26	1.14
Total	2.60	1.26	1.14

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Perdue Farms	4.16	4.16	4.16	4.29	4.46
Total	4.16	4.16	4.16	4.29	4.46

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Perdue Farms	2.02	2.02	2.02	2.08	2.16
Total	2.02	2.02	2.02	2.08	2.16

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Perdue Farms	1.82	1.82	1.82	1.88	1.95
Total	1.82	1.82	1.82	1.88	1.95

Appendix 5.

Planning Region II

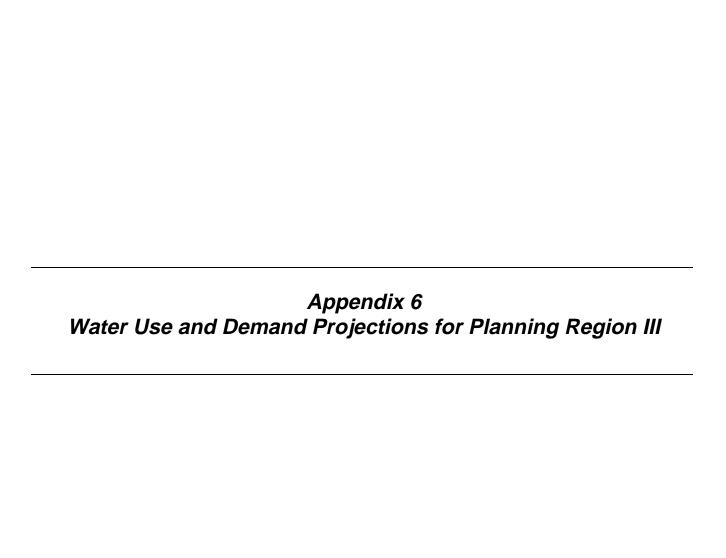
c. Individually Projected Users

Projections in Mgal/d

						i iojec	tions in i	/igai/u	
County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020
Okaloosa	US Air Force: Eglin AFB	Main System	1	C-I	4.57	4.65	4.73	4.81	4.89
Okaloosa	US Air Force: Hulbert Field AFI	В	1	C-I	0.89	0.98	1.08	1.18	1.28
Okaloosa	Auburn Water System			PS	1.21	1.42	1.66	1.80	2.03
Okaloosa	Baker Water System			PS	0.18	0.20	0.22	0.24	0.26
Okaloosa	Crestview, city of			PS	2.14	2.39	2.64	2.89	3.14
Okaloosa	Destin Water Users		1	PS	3.14	3.52	3.95	4.43	4.96
Okaloosa	Fort Walton Beach, city of		1	PS	3.46	3.71	3.96	4.21	4.45
Okaloosa	Holt Water System			PS	0.09	0.11	0.12	0.13	0.14
Okaloosa	Laurel Hill, city of			PS	0.14	0.16	0.17	0.18	0.19
Okaloosa	Mary Ester, city of		1	PS	0.77	0.81	0.85	0.89	0.93
Okaloosa	Milligan Water System			PS	0.16	0.21	0.27	0.35	0.45
Okaloosa	Niceville, town of		1	PS	3.15	3.56	3.98	4.40	4.82
Okaloosa	Okaloosa County Water/Sewer	Bluewater Bay	1	PS	1.19	1.27	1.36	1.44	1.52
Okaloosa	Okaloosa County Water/Sewer	Main (Garnier)	1	PS	5.70	6.04	6.41	6.79	7.21
Okaloosa	Okaloosa County Water/Sewer	County West-Seashor	1	PS	0.66	0.72	0.79	0.86	0.93
Okaloosa	Okaloosa County Water/Sewer	Mid County-Del Cerro		PS	0.46	0.52	0.59	0.68	0.78
Okaloosa	Seminole Community W/S		1	PS	0.10	0.10	0.10	0.10	0.09
Okaloosa	Valparaiso, city of		1	PS	0.63	0.64	0.64	0.64	0.64
Santa Rosa	Air Products			C-I	3.20	3.20	3.20	3.20	3.20
Santa Rosa	Sterling Fibers (Cytec)	Santa Rosa Plant		C-I	3.00	3.50	4.00	4.50	5.00
	Bagdad/Garron W/S			PS	0.45	0.51	0.57	0.63	0.70
	Berrydale Water System			PS	0.25	0.30	0.34	0.39	0.43
	Chumuckla, town of			PS	0.29	0.34	0.41	0.50	0.43
	East Milton Water System			PS	0.97	1.19	1.41	1.63	1.85
	Gulf Breeze, city of		1	PS	0.90	0.95	1.00	1.06	1.11
	Holly/Navarre W/S		1	PS	1.89	2.35	2.81	3.27	3.73
	Jay, town of			PS	0.27	0.27	0.27	0.27	0.27
	Midway Water System		1	PS	1.93	2.23	2.53	2.83	3.13
	Milton, city of			PS	2.07	2.21	2.35	2.49	2.64
	Moore Creek/Mt. Carmel			PS	0.33	0.36	0.45	0.53	0.62
	Navarre Beach		1	PS	0.37	0.38	0.40	0.42	0.43
	Pace, city of			PS	2.96	3.39	3.82	4.25	4.68
	Point Baker Water System			PS	0.78	0.90	1.01	1.12	1.24
	South Santa Rosa Utilities		1	PS	0.98	1.10	1.21	1.33	1.44
	Purdue Farms (Showell)			C-I	1.60	1.60	1.60	1.65	1.71
	Argyle Water System			PS	0.08	0.08	0.08	0.08	0.08
	DeFuniak Springs, city of			PS	1.11	1.13	1.14	1.14	1.14
Walton	Freeport, town of		1	PS	0.32	0.39	0.46	0.53	0.60
Walton	Inlet Beach Water System		1	PS	0.09	0.12	0.15	0.19	0.24
Walton	Mossy Head Water System		•	PS	0.10	0.11	0.12	0.13	0.15
Walton	Paxton, town of			PS	0.18	0.18	0.12	0.18	0.18
Walton	Regional Utilities*	Fl. Comm. Srvc. Corp.	1	PS	1.06	1.34	1.61	1.89	2.16
Walton	Smith Water Company	Villa Tasso & Choctaw	1	PS	0.13	0.14	0.15	0.16	0.17
Walton	South Walton Utilities	villa racco a circolan	1	PS	2.03	2.32	2.61	2.90	3.18
vvaltori	Journ Marton Junios		1		۷.05	2.02	2.01	2.50	0.10

^{*}Aquired Camp Creek in 1995.

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.



Appendix 6. Planning Region III a. System Inventory

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Arizona Chemical	Bay County Plant	Bay		C-I	4.60	Deer Point Lake	91	Floridan Aquifer	9
Stone Container		Bay		C-I	21.69	Deer Point Lake	N/A	Floridan Aquifer	N/A
Tyndall Air Force Base		Bay		C-I	1.40	Floridan aquifer	N/A	Bay County	N/A
Gulf Power	Smith Power Plant	Bay		PWR	263.68	North Bay	N/A	Floridan Aquifer	N/A
Bay County Public Utilities	Potable Water System	Bay		PS	12.65	Deer Point Lake	100		
Lynn Haven, city of		Bay		PS	1.55	Floridan aquifer	100	Bay County	N/A
Mexico Beach, city of		Bay		PS	0.42	Floridan aquifer	100		
Panama City Beach		Bay	4	PS	9.65	Bay County	69	Floridan aquifer	31
Sandy Creek Utilities		Bay		PS	0.05	Floridan aquifer	100		
Bay Point Yacht & CC		Bay	4	R-I	0.27	N/A	N/A		
Bay Dunes		Bay		R-I	N/A	N/A	N/A		
City Sports	Majette Dunes Golf & CC	Bay		R-I	0.18	N/A	N/A		
Club at Sandy Creek, The		Bay		R-I	0.05	Stormwater	100		
Edge Water Beach Resort GC		Bay	4	R-I	0.03	Floridan aquifer	N/A		
Holiday Golf & Racquet Club		Bay	4	R-I	0.21	Stormwater	N/A		
Edgewater Estates	Hombre Golf Club	Bay	4	R-I	0.16	Stormwater	N/A		
Panama CC		Bay		R-I	0.18	N/A	N/A		
Signal Hill GC, Inc.		Bay		R-I	0.17	Stormwater	N/A	Floridan aquifer	N/A
Tyndall AFB	Pelican Point GC	Bay		R-I	0.24	Floridan aquifer	N/A	_	
Bay Pines MHP		Bay		SPS	0.02	Floridan aquifer	100		
Lisenby MHP		Bay		SPS	0.01	Floridan aquifer	100		

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 6.

Planning Region III

b. Projection summary tables

The following projections were prepared by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the North West Florida Water Management District. These projections are for planning purposes only.

Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; and the Northwest Florida Water Management District; Bureau of Economic and Business Research; and the individual utilities.

Foot Notes and Specific Utility Projection Information: Bay County

- Bay County Utilities: Water use projection and base data did not include water purchased by Panama City Beach. Where Bay County Utility is mentioned throughout this report (historical and projected) it is actually the total minus the amount sold to Panama City Beach. Additionally, water use projections for Bay County Utilities do not include water sold to Stone Container Corporation.
- Panama City Beach: Water use projection was based on a summation of historical water use consisting of water purchased from Bay County Utilities and water withdrawn from their own wells.
- Stone Container Corporation: Water use projections were provided by Stone Container and includes the water sold to Arizona Chemicals.

Planning Region III Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,877.89	24.32	48.91	37.09	33.07	191	127,562	91.7%	
Domestic S.S. & Small Public S.S.	813.59	2.23				192	11,611	8.3%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	692.83	1.90							851
Power Generation	94,626.20	259.25	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 115,118.20 315.39 139,173 851

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,834.61	24.20	48.79	37.15	33.07	178	135,829	93.4%	
Domestic S.S & Small Public S.S.	645.56	1.77				185	9,535	6.6%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	725.83	1.99							891
Power Generation	96,245.00	263.68	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 116,558.68 319.34 145,364 891

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	9,588.73	26.27	52.96	40.36	35.92	183	143,456	92.1%	
Domestic S.S & Small Public S.S.	858.47	2.35				191	12,307	7.9%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	758.82	2.08							932
Power Generation	97,745.00	267.79	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 119,058.71 326.19 155,763 932

Planning Region III Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,609.65	29.07	58.60	44.56	39.68	192	151,192	91.0%	
Domestic S.S & Small Public S.S.	1,079.84	2.96				198	14,970	9.0%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	824.80	2.26	0.00	0.00	0.00				1,013
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	121,866.98	333.88					166,162		1,013

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	11,898.02	32.60	65.70	49.77	44.38	205	159,046	90.1%	
Domestic S.S & Small Public S.S.	1,317.87	3.61				206	17,515	9.9%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	857.79	2.35							1,053
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	123,426.37	338.15					176,561		1,053

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,454.08	36.86	74.27	55.98	50.01	221	167,039	89.3%	
Domestic S.S & Small Public S.S.	1,582.25	4.33				218	19,921	10.7%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	923.78	2.53							1,134
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	125,312.81	343.32					186,960		1,134

Total 125,312.81 343.32 186,960 1,134

Planning Region III Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	24.32	24.20	26.27	29.07	32.60	36.86
Domestic S.S & Small Public S.S.	2.23	1.77	2.35	2.96	3.61	4.33
Commercial-Industrial Self-supplied	27.69	27.69	27.69	27.69	27.69	27.69
Recreational Irrigation	1.90	1.99	2.08	2.26	2.35	2.53
Power Generation	259.25	263.68	267.79	271.90	271.90	271.90
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

Maximum Bany 1 low in migara										
Use Category	1995	2000	2005	2010	2015	2020				
Public Supply	48.91	48.79	52.96	58.60	65.70	74.27				
Domestic S.S & Small Public S.S.		-	-	-	-	-				
Commercial-Industrial Self-supplied	40.38	40.38	40.38	40.38	40.38	40.38				
Recreational Irrigation										
Power Generation	332.24	332.24	332.24	332.24	332.24	271.90				
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A				

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	37.09	37.15	40.36	44.56	49.77	55.98
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	332.24	332.24	332.24	332.24	271.90
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	33.07	33.07	35.92	39.68	44.38	50.01
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	332.24	332.24	332.24	332.24	271.90
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

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Bay County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,877.89	24.32	48.91	37.09	33.07	191	127,562	91.7%	
Domestic S.S. & Small Public S.S.	813.59	2.23				192	11,611	8.3%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	692.83	1.90							851
Power Generation	94,626.20	259.25	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 115,118.20 315.39 139,173 851

2000 Water Use Projection

-		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,834.61	24.20	48.79	37.15	33.07	178	135,829	93.4%	
Domestic S.S & Small Public S.S.	645.56	1.77				185	9,535	6.6%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	725.83	1.99							891
Power Generation	96,245.00	263.68	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 116,558.68 319.34 145,364 891

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	9,588.73	26.27	52.96	40.36	35.92	183	143,456	92.1%	
Domestic S.S & Small Public S.S.	858.47	2.35				191	12,307	7.9%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	758.82	2.08							932
Power Generation	97,745.00	267.79	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 119,058.71 326.19 155,763 932

Bay County Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,609.65	29.07	58.60	44.56	39.68	192	151,192	91.0%	
Domestic S.S & Small Public S.S.	1,079.84	2.96				198	14,970	9.0%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	824.80	2.26	0.00	0.00	0.00				1,013
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	121,866.98	333.88					166,162		1,013

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	11,898.02	32.60	65.70	49.77	44.38	205	159,046	90.1%	
Domestic S.S & Small Public S.S.	1,317.87	3.61				206	17,515	9.9%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	857.79	2.35							1,053
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	123,426.37	338.15					176,561		1,053

2020 Water Use Projection

	Average	Maximum	Peak	Peak 3				Total
Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
13,454.08	36.86	74.27	55.98	50.01	221	167,039	89.3%	
1,582.25	4.33				218	19,921	10.7%	
10,107.69	27.69	40.38	N/A	N/A				
923.78	2.53							1,134
99,245.00	271.90	332.24	327.23	318.53				
0.00	0.00	N/A	0.00	0.00				0.00
	in Mgal 13,454.08 1,582.25 10,107.69 923.78 99,245.00	Total Flow in Mgal/d 13,454.08 36.86 1,582.25 4.33 10,107.69 27.69 923.78 2.53 99,245.00 271.90	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d 13,454.08 36.86 74.27 1,582.25 4.33 10,107.69 27.69 40.38 923.78 2.53 99,245.00 271.90 332.24	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d 13,454.08 36.86 74.27 55.98 1,582.25 4.33 51.010.7.69 40.38 N/A 923.78 2.53 271.90 332.24 327.23	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Month in Mgal/d 13,454.08 36.86 74.27 55.98 50.01 1,582.25 4.33 N/A N/A 923.78 2.53 318.53	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d 13,454.08 36.86 74.27 55.98 50.01 221 1,582.25 4.33 218 218 10,107.69 27.69 40.38 N/A N/A 923.78 2.53 327.23 318.53	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Per Capita in Mgal/d Population served 13,454.08 36.86 74.27 55.98 50.01 221 167,039 1,582.25 4.33 218 19,921 10,107.69 27.69 40.38 N/A N/A 923.78 2.53 332.24 327.23 318.53	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Per Capita in gal/d Population Served Population Served 13,454.08 36.86 74.27 55.98 50.01 221 167,039 89.3% 1,582.25 4.33 218 19,921 10.7% 10,107.69 27.69 40.38 N/A N/A 923.78 2.53 332.24 327.23 318.53

Total 125,312.81 343.32 186,960 1,134

Bay County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	24.32	24.20	26.27	29.07	32.60	36.86
Domestic S.S & Small Public S.S.	2.23	1.77	2.35	2.96	3.61	4.33
Commercial-Industrial Self-supplied	27.69	27.69	27.69	27.69	27.69	27.69
Recreational Irrigation	1.90	1.99	2.08	2.26	2.35	2.53
Power Generation	259.25	263.68	267.79	271.90	271.90	271.90
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020						
Public Supply	48.91	48.79	52.96	58.60	65.70	74.27						
Domestic S.S & Small Public S.S.		-	-	-	-	-						
Commercial-Industrial Self-supplied	40.38	40.38	40.38	40.38	40.38	40.38						
Recreational Irrigation												
Power Generation	332.24	332.24	332.24	332.24	332.24	271.90						
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A						

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	37.09	37.15	40.36	44.56	49.77	55.98
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	332.24	332.24	332.24	332.24	271.90
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	33.07	33.07	35.92	39.68	44.38	50.01
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	332.24	332.24	332.24	332.24	271.90
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Bay County ASC-4 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,522.49	9.65	20.27	16.54	14.38	263	36,709.00	91.3%	
Domestic S.S. & Small Public S.S.	334.89	0.92				263	3,490.00	8.7%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	329.92	0.90							405.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A
Total	4,187.30	11.47					40,199.00		405.00

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	3,793.21	10.39	21.82	17.81	15.48	273	38,081.50	92.2%	
Domestic S.S & Small Public S.S.	318.93	0.87				273	3,201.88	7.8%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	329.92	0.90							405.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	4,442.06	12.17					41,283.38		405.00

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,151.56	11.37	23.89	19.50	16.95	284	40,093.64	90.6%	
Domestic S.S & Small Public S.S.	429.00	1.18				284	4,143.05	9.4%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	362.91	0.99							445.50
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	4,943.47	13.54					44,236.69		445.50

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,509.92	12.36	25.95	21.18	18.41	291	42,406.96	89.9%	
Domestic S.S & Small Public S.S.	508.67	1.39				291	4,783.04	10.1%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	395.91	1.08							486.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	5.414.50	14.83					47.190.01		486.00

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	4,868.27	13.34	28.01	22.86	19.87	296	45,021.46	89.8%	
Domestic S.S & Small Public S.S.	553.84	1.52				296	5,121.86	10.2%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	395.91	1.08							486.00
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	5.818.01	15.94					50.143.32		486.00

2020 Water Use Projection

2020 Water Ober Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,226.62	14.32	30.07	24.54	21.34	299	47,937.14	90.3%	
Domestic S.S & Small Public S.S.	562.54	1.54				299	5,159.50	9.7%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	428.90	1.18							526.50
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	6,218.06	17.04	•	•		•	53,096.64	•	526.50

Bay County ASC-4 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.65	10.39	11.37	12.36	13.34	14.32
Domestic S.S & Small Public S.S.	0.92	0.87	1.18	1.39	1.52	1.54
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.90	0.90	0.99	1.08	1.08	1.18
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020				
Public Supply	20.27	21.82	23.89	25.95	28.01	30.07				
Domestic S.S & Small Public S.S.										
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation										
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A				

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	16.54	17.81	19.50	21.18	22.86	24.54
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	14.38	15.48	16.95	18.41	19.87	21.34
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Bay County ASC-4 Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.10	2.10	2.10	2.10	2.10
Peak Month	1.71	1.71	1.71	1.71	1.71
Peak 3 Month	1.49	1.49	1.49	1.49	1.49

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Panama City Beach (LIN)	3522.49	3,793.21	4,151.56	4,509.92	4,868.27	5,226.62
Total	3,522.49	3,793.21	4,151.56	4,509.92	4,868.27	5,226.62

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Panama City Beach (LIN)	9.65	10.39	11.37	12.36	13.34	14.32
Total	9.65	10.39	11.37	12.36	13.34	14.32

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Panama City Beach	2.10	1.71	1.49

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Panama City Beach	21.82	23.89	25.95	28.01	30.07
Total	21.82	23.89	25.95	28.01	30.07

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Panama City Beach	17.81	19.50	21.18	22.86	24.54
Total	17.81	19.50	21.18	22.86	24.54

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Bay County ASC-4 Summary

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Panama City Beach	15.48	16.95	18.41	19.87	21.34
Total	15.48	16.95	18.41	19.87	21.34

Percent Served by Public Supply

	•				
Year	2000	2005	2010	2015	2020
Bay County ASC-4	92%	91%	90%	90%	90%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Panama City Beach	38,082	40,094	42,407	45,021	47,937
Total	38,082	40,094	42,407	45,021	47,937

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	28%	28%	28%	28%	28%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	41,283		47,190	50,143	53,097

Golf Course Projections

Base Year: 1995		Projected: 2000-2020 Water Use in Mgal					
Total Population	40,199		Total	Number of	Acres	Total GC	
Total Number of Holes	90	Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0022389	2000	41,283	90	405	329.92	
Total Number Acres Irrigated	405	2005	44,237	99	446	362.91	
Inches Per Acre	30	2010	47,190	108	486	395.91	
Total GC Water Use in Mgal	329.92	2015	50,143	108	486	395.91	
Water Use Per Hole in Mgal	3.67	2020	53,097	117	527	428.90	

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Golf Course Name	Holes	Location
Bay Point Yacht & CC (1)	18	100 Delwood Beach Rd., Panama City Beach, 32411
Bay Point Yacht & CC (2)	18	100 Delwood Beach Rd., Panama City Beach, 32411
Edgewater Beach Resort GC	9	111212 Front Beach Rd., Panama City Beach, 32407
Holiday Golf & Racquet Club	27	100 Fairway Blvd., Panama City Beach,32407
Hombre GC/Edgewater Estates	18	120 Coyote Pass, Panama City Beach, 32407

Total 90

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1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,355.40	14.67	28.64	20.55	18.69	161	90,853	91.8%	
Domestic S.S. & Small Public S.S.	478.70	1.31				161	8,121	8.2%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	362.91	0.99							446
Power Generation	94,626.20	259.25	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 110,930.90 303.92 98,974 446

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,041.40	13.81	26.96	19.34	17.59	141	97,748	93.9%	
Domestic S.S & Small Public S.S.	326.63	0.89				141	6,333	6.1%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	395.91	1.08							486
Power Generation	96,245.00	263.68	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 112,116.62 307.17 104,081 486

2005 Water Use Projection

2000 Water Ode i Tojeotion									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	5,437.17	14.90	29.08	20.86	18.97	144	103,362	92.7%	
Domestic S.S & Small Public S.S.	429.47	1.18				144	8,164	7.3%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	395.91	1.08							486
Power Generation	97,745.00	267.79	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 114,115.24 312.64 111,526 486

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	6,099.73	16.71	32.65	23.38	21.27	154	108,785	91.4%	
Domestic S.S & Small Public S.S.	571.17	1.56				154	10,187	8.6%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	428.90	1.18							527
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	116,452.49	319.05					118,972		527

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	7,029.75	19.26	37.69	26.91	24.51	169	114,025	90.2%	
Domestic S.S & Small Public S.S.	764.03	2.09				169	12,393	9.8%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	461.89	1.27							567
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	117,608.36	322.21					126,418		567

2020 Water Use Projection

2020 Water Ode i Tojeotion									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	8,227.46	22.54	44.20	31.44	28.67	189	119,102	89.0%	
Domestic S.S & Small Public S.S.	1,019.71	2.79				189	14,761	11.0%	
Commercial-Industrial Self-supplied	10,107.69	27.69	40.38	N/A	N/A				
Recreational Irrigation	494.88	1.36							608
Power Generation	99,245.00	271.90	332.24	327.23	318.53				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00
Total	119,094.75	326.29		•	•		133,863	·	608

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	14.67	13.81	14.90	16.71	19.26	22.54
Domestic S.S & Small Public S.S.	1.31	0.89	1.18	1.56	2.09	2.79
Commercial-Industrial Self-supplied	27.69	27.69	27.69	27.69	27.69	27.69
Recreational Irrigation	0.99	1.08	1.08	1.18	1.27	1.36
Power Generation	259.25	263.68	267.79	271.90	271.90	271.90
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

Maximum Bany 1 low in Mgana								
Use Category	1995	2000	2005	2010	2015	2020		
Public Supply	28.64	26.96	29.08	32.65	37.69	44.20		
Domestic S.S & Small Public S.S.								
Commercial-Industrial Self-supplied	40.38	40.38	40.38	40.38	40.38	40.38		
Recreational Irrigation								
Power Generation	332.24	332.24	332.24	332.24	332.24	332.24		
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A		

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	20.55	19.34	20.86	23.38	26.91	31.44
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	327.23	327.23	327.23	327.23	327.23	327.23
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	18.69	17.59	18.97	21.27	24.51	28.67
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	318.53	318.53	318.53	318.53	318.53	318.53
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

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Bay County NonASC-4 Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.95	1.95	1.95	1.96	1.96
Peak Month	1.40	1.40	1.40	1.40	1.39
Peak 3 Month	1.27	1.27	1.27	1.27	1.27

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Bay County Public Utilities (PAR)	4,618.80	4,275.15	4,610.82	5,214.27	6,085.50	7,224.50
Lynn Haven (LIN)	566.20	601.31	659.28	717.26	775.23	833.21
Mexico Beach (GOM)	152.40	145.88	147.32	147.75	147.88	147.92
Sandy Creek Utilities (LIN)	18.00	19.05	19.75	20.44	21.14	21.84
Total	5,355.40	5,041.40	5,437.17	6,099.73	7,029.75	8,227.46

Note: Bay Co. Public Utilities 1996 water use was 4,189.91; Mexico Beach 1996 total water use was 127.45

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Bay County Public Utilities (PAR)	12.65	11.71	12.63	14.29	16.67	19.79
Lynn Haven (LIN)	1.55	1.65	1.81	1.97	2.12	2.28
Mexico Beach (GOM)	0.42	0.40	0.40	0.40	0.41	0.41
Sandy Creek Utilities (LIN)	0.05	0.05	0.05	0.06	0.06	0.06
Total	14.67	13.81	14.90	16.71	19.26	22.54

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Bay County Public Utilities	2.00	1.37	1.27
Lynn Haven	1.65	1.59	1.29
Mexico Beach	1.81	1.48	1.36
Sandy Creek Utilities	1.87	1.75	1.50

Public Supply: Projected Maximum Daily Flow in Mgal/d

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Year	2000	2005	2010	2015	2020
Bay County Public Utilities	23.43	25.26	28.57	33.35	39.59
Lynn Haven	2.72	2.98	3.24	3.50	3.77
Mexico Beach	0.72	0.73	0.73	0.73	0.73
Sandy Creek Utilities	0.10	0.10	0.10	0.11	0.11
Total	26.96	29.08	32.65	37.69	44.20

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bay County Public Utilities	16.05	17.31	19.57	22.84	27.12
Lynn Haven	2.61	2.86	3.11	3.37	3.62
Mexico Beach	0.59	0.60	0.60	0.60	0.60
Sandy Creek Utilities	0.09	0.09	0.10	0.10	0.10
Total	19.34	20.86	23.38	26.91	31.44

Public Supply: Projected Peak 3 Month in Mgal/d

		,			
Year	2000	2005	2010	2015	2020
Bay County Public Utilities	14.85	16.02	18.11	21.14	25.10
Lynn Haven	2.12	2.32	2.53	2.73	2.93
Mexico Beach	0.54	0.55	0.55	0.55	0.55
Sandy Creek Utilities	0.08	0.08	0.08	0.09	0.09
Total	17.59	18.97	21.27	24.51	28.67

Percent Served by Public Supply

	,				
Year	2000	2005	2010	2015	2020
Bay County NonASC-4	94%	93%	91%	90%	89%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Bay County Public Utilities	83,591	87,924	92,257	96,590	100,924
Lynn Haven	11,897	12,978	13,868	14,574	15,118
Mexico Beach	1,820	2,000	2,180	2,360	2,540
Sandy Creek Utilities	440	460	480	500	520
Total	97,748	103,362	108,785	114,025	119,102

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Bay County NonASC-4 Summary

Total Area Population

Year	2000	2005	2010	2015	2020
Population	104,081	111,526	118,972	126,418	133,863

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Arizona Chemical	1679.66	1679.66	1679.66	1679.66	1679.66
Stone Container	7917.03	7917.03	7917.03	7917.03	7917.03
Tyndall Air Force Base	511.00	511.00	511.00	511.00	511.00
Total	10107.69	10107.69	10107.69	10107.69	10107.69

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Arizona Chemical	4.60	4.60	4.60	4.60	4.60
Stone Container	21.69	21.69	21.69	21.69	21.69
Tyndall Air Force Base	1.40	1.40	1.40	1.40	1.40
Total	27.69	27.69	27.69	27.69	27.69

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Arizona Chemical	1.35	1.19	1.15
Srone Container	1.40	1.24	1.18
Tyndall Air Force Base	2.71	N/A	N/A
Total	5.46	2.42	2.33

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Arizona Chemical	6.21	6.21	6.21	6.21	6.21
Srone Container	30.37	30.37	30.37	30.37	30.37
Tyndall Air Force Base	3.80	3.80	3.80	3.80	3.80
Total	40.38	40.38	40.38	40.38	40.38

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Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Arizona Chemical	5.45	5.45	5.45	5.45	5.45
Srone Container	26.85	26.85	26.85	26.85	26.85
Tyndall Air Force Base	N/A	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A	N/A

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Arizona Chemical	5.29	5.29	5.29	5.29	5.29
Srone Container	25.68	25.68	25.68	25.68	25.68
Tyndall Air Force Base	N/A	N/A	N/A	N/A	N/A
Total	N/A	N/A	N/A	N/A	N/A

Golf Course Projections

Base Year: 1995		Projected: 2000)-2020 Water U	se in Mgal		
Total Population	98,974		Total	Number of	Acres	Total GC
Total Number of Holes	99	Year	Population	Holes	Irrigated	Water Use
Holes Per Person	0.0010003	2000	104,081	108	486	395.91
Total Number Acres Irrigated	446	2005	111,526	108	486	395.91
Inches Per Acre	30	2010	118,972	117	527	428.90
Total GC Water Use in Mgal	362.91	2015	126,418	126	567	461.89
Water Use Per Hole in Mgal	3.67	2020	133,863	135	608	494.88

Golf Course Name Holes Location

Bay Dunes	18	Panama City
City Sports, Majette Dunes Gol	18	5304 Majette Tower Rd, Panama City, 32404
Club at Sandy Creek, The	9	1732 Highway 2297, Panama City, 32404
Panama CC	18	100 Country Club Drive, Lynn Haven, 32444
Signal Hill GC, Inc.	18	9615 Thomas Drive, Panama City, 32407
Tyndall AFB/Pelican Point GC	18	Building 3029, Tyndall AFB, 32403

Total 99

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Bay County NonASC-4 Summary

Power Generation: Projected Annual Flow

Year	2000	2005	2010	2015	2020
Gulf Power-Smith (UTIL)	96,245.00	97,745.00	99,245.00	99,245.00	99,245.00
Total	96,245.00	97,745.00	99,245.00	99,245.00	99,245.00

Power Generation: Projected Average Daily Flow (Mgal/d)

Year	2000	2005	2010	2015	2020
Gulf Power-Smith (UTIL)	263.68	267.79	271.90	271.90	271.90
Total	263.68	267.79	271.90	271.90	271.90

Power Generation: Ratios

Ratios	Max-Day	Peak Month	Peak3Month
Gulf Power-Smith	1.26	1.24	1.21
Total	1.26	1.24	1.21

Power Generation: Projected Max Day

Year	2000	2005	2010	2015	2020
Gulf Power-Smith	332.24	337.42	342.60	342.60	342.60
Total	332.24	337.42	342.60	342.60	342.60

Power Generation: Projected Peak Month

Year	2000	2005	2010	2015	2020
Gulf Power-Smith	327.23	332.33	337.43	337.43	337.43
Total	327.23	332.33	337.43	337.43	337.43

Power Generation: Projected 3 Month Peak

Tower Contration: Trojected & Month Tour										
Year	2000	2005	2010	2015	2020					
Gulf Power-Smith	318.53	323.50	328.46	328.46	328.46					
Total	318.53	323.50	328.46	328.46	328.46					

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Appendix 6.

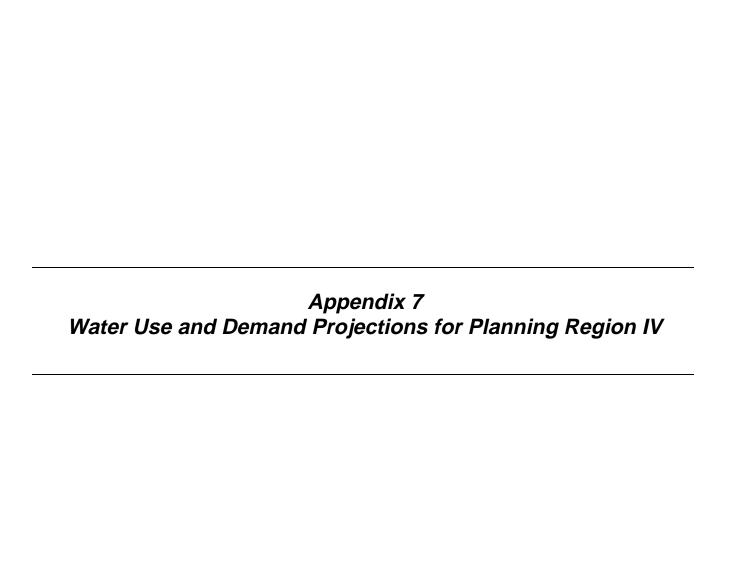
Planning Region III

c. Individually Projected Users

Projections in Mgal/d

County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020
Bay	Arizona Chemical	Bay County Plant		C-I	4.60	4.60	4.60	4.60	4.60
Bay	Stone Container			C-I	21.69	21.69	21.69	21.69	21.69
Bay	Tyndall Air Force Base			C-I	1.40	1.40	1.40	1.40	1.40
Bay	Gulf Power	Smith Power Plant		PWR	263.68	267.79	271.90	271.90	271.90
Bay	Bay County Public Utilities	Potable Water System		PS	11.71	12.63	14.29	16.67	19.79
Bay	Lynn Haven, city of			PS	1.65	1.81	1.97	2.12	2.28
Bay	Mexico Beach, city of			PS	0.40	0.40	0.40	0.41	0.41
Bay	Panama City Beach		4	PS	10.39	11.37	12.36	13.34	14.32
Bay	Sandy Creek Utilities			PS	0.05	0.05	0.06	0.06	0.06

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.



Appendix 7. Planning Region IV a. System Inventory

1995 water use

	Average		Average	Primary	Percent	Secondary	Percent		
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Altha, town of		Calhoun		PS	0.10	Floridan aquifer	100		
Blountstown, city of		Calhoun		PS	0.58	Floridan aquifer	100		
Bonifay, city of		Holmes		PS	0.94	Floridan aquifer	100		
Ponce DeLeon, town of		Holmes		PS	0.07	Floridan aquifer	100		
Bonifay Country Club		Holmes		R-I	N/A	N/A	N/A		
Red Bay GC		Holmes		R-I	N/A	N/A	N/A		
Dogwood Lake Estates		Holmes		SPS	0.07	Floridan aquifer	100		
Esto, town of		Holmes		SPS	0.03	Floridan aquifer	100		
Noma, town of		Holmes		SPS	0.05	Floridan aquifer	100		
Westville, town of		Holmes		SPS	0.04	Floridan aquifer	100		
Blue Springs Baptist Center		Jackson		C-I	0.03	N/A	N/A		
FDNR	FL Caverns SP	Jackson		C-I	0.05	N/A	N/A		
FDOC	Apalachee Corr Inst.	Jackson		C-I	0.64	N/A	N/A		
FDOC	Dozier School	Jackson		C-I	0.09	N/A	N/A		
FDOC	Sunland Center	Jackson		C-I	0.50	N/A	N/A		
Jackson County Corr. Instit.		Jackson		C-I	0.22	N/A	N/A		
Marriana 76 Truck Stop		Jackson		C-I	0.02	N/A	N/A		
Cottondale, town of		Jackson		PS	0.15	Floridan aquifer	100		
Graceville, city of		Jackson		PS	0.38	Floridan aquifer	100		
Grandridge, city of		Jackson		PS	0.09	Floridan aquifer	100		
Greenwood, town of		Jackson		PS	0.08	Floridan aquifer	100		
Malone, town of		Jackson		PS	0.07	Floridan aquifer	100		
Marianna, city of		Jackson		PS	1.18	Floridan aquifer	100		
Sneads, town of		Jackson		PS	0.25	Floridan aquifer	100		
Gulf Power	Scholtz Plant	Jackson		PWR	50.31	N/A			
Caverns Golf Course		Jackson		R-I	N/A	N/A	N/A		
Great Oaks Golf Course		Jackson		R-I	N/A	N/A	N/A		
Magnolia Oaks GC		Jackson		R-I	N/A	N/A	N/A		
Alford, town of		Jackson		SPS	0.05	Floridan aquifer	100		
Campbellton, town of		Jackson		SPS	0.03	Floridan aquifer	100		
Jacobs Community W/S		Jackson		SPS	0.03	Floridan aquifer	100		
FDOC	Liberty Corr Inst	Liberty		C-I	0.24	N/A	N/A		
Bristol, city of		Liberty		PS	0.22	Floridan aquifer	100		
Hosford-Telogia Water System		Liberty		PS	0.07	Floridan aquifer	100		
Timber Energy		Liberty		PWR	0.39	N/A	N/A		
Estiffanalga Water System		Liberty		SPS	0.01	Floridan aquifer	100		

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Sumatra Water System		Liberty		SPS	0.01	Floridan aquifer	100		
Talquin Electric Coop	Sweetwater	Liberty		SPS	0.01	Floridan aquifer	100		
FDOC	Washington Corr Inst	Washington		C-I	0.11	N/A	N/A		
Carryville, town of		Washington		PS	0.08	Floridan aquifer	100		
Chipley, city of		Washington		PS	0.74	Floridan aquifer	100		
Deltona/Sunny Hills	Southern States Utilities	Washington		PS	0.15	Floridan aquifer	100		
Vernon Water System		Washington		PS	0.13	Floridan aquifer	100		
Falling Waters Country Club		Washington		R-I	N/A	N/A	N/A		
Sunny Hills Golf & Country Club		Washington		R-I	N/A	N/A	N/A		
Wausau, town of		Washington		SPS	0.04	Floridan aquifer	100		

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 7. Planning Region IV b. Projection summer

b. Projection summary tables
The following projections were prepared by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the Northwest Florida Water Management District. These projections are for planning purposes only.
Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; Northwest Florida Water Management District; Bureau of Economic and Business Research; and individual utilities.

Region IV Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,925.80	5.28	9.93	7.47	6.78	164	32,084	31.5%	
Domestic S.S. & Small Public S.S.	4,379.82	12.00				172	69,749	68.5%	
Commercial-Industrial Self-supplied	693.40	1.90	N/A	N/A	N/A				
Recreational Irrigation	254.04	0.70							446
Power Generation	18,505.54	50.70	N/A	N/A	N/A				
Agricultural	4,119.03	11.29	N/A	N/A	N/A				N/A

Total 29,877.62 81.86 101,833 446

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,143.38	5.87	11.07	8.32	7.55	176	33,361	33.3%	
Self-supplied Domestic	4,506.63	12.35				185	66,875	66.7%	
Commercial-Industrial Self-supplied	693.40	1.90	N/A	N/A	N/A				
Recreational Irrigation	254.04	0.70							446
Power Generation	29,449.90	80.68	N/A	N/A	N/A				
Agricultural	6,450.29	17.67	N/A	60.62	46.78				25,850

Total 43,497.64 119.17 100,236 26,296

2005 Water Use Projection

2000 Water Ode Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,321.87	6.36	11.99	9.02	8.19	181	35,131	33.5%	
Self-supplied Domestic	4,894.33	13.41				192	69,892	66.5%	
Commercial-Industrial Self-supplied	693.40	1.90	N/A	N/A	N/A				
Recreational Irrigation	254.04	0.70							446
Power Generation	31,292.67	85.73	N/A	N/A	N/A				
Agricultural	5,980.90	16.39	N/A	55.10	42.61				23,650

Total 45,437.21 124.49 105,023 24,096

Region IV Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,494.44	6.83	12.87	9.70	8.82	184	37,137	33.6%	
Self-supplied Domestic	5,280.05	14.47				197	73,496	66.4%	
Commercial-Industrial Self-supplied	693.40	1.90	N/A	N/A	N/A				
Recreational Irrigation	277.13	0.76							486
Power Generation	33135.44	90.78	N/A	N/A	N/A				
Agricultural	6,458.69	17.70	N/A	58.93	45.66				25,140
Total	48,339.16	132.44					110,633		25,626

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,667.74	7.31	13.76	10.38	9.45	186	39,387	33.9%	
Self-supplied Domestic	5,629.94	15.42				201	76,883	66.1%	
Commercial-Industrial Self-supplied	693.40	1.90	N/A	N/A	N/A				
Recreational Irrigation	300.23	0.82							527
Power Generation	33135.44	90.78	N/A	N/A	N/A				
Agricultural	6,731.70	18.44	N/A	61.17	47.38				26,426
Total	49,158.45	134.68					116,270		26,953

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	2,850.18	7.81	14.70	11.11	10.12	187	41,864	34.3%	
Self-supplied Domestic	5,981.62	16.39				204	80,363	65.7%	
Commercial-Industrial Self-supplied	693.40	1.90	N/A	N/A	N/A				
Recreational Irrigation	300.23	0.82							527
Power Generation	33135.44	90.78	N/A	N/A	N/A				
Agricultural	7,532.51	20.64	N/A	68.97	53.37				30,589

Total 50,493.38 138.34 122,227 31,116

Region IV Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.28	5.87	6.36	6.83	7.31	7.81
Self-supplied Domestic	12.00	12.35	13.41	14.47	15.42	16.39
Commercial-Industrial Self-supplied	1.90	1.90	1.90	1.90	1.90	1.90
Recreational Irrigation	0.70	0.70	0.70	0.76	0.82	0.82
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	11.29	17.67	16.39	17.70	18.44	20.64

Maximum Daily Flow in Mgal/d

masumam zamy mon mingan a						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	9.93	11.07	11.99	12.87	13.76	14.70
Self-supplied Domestic	-	-	-	-	-	-
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	7.47	8.32	9.02	9.70	10.38	11.11
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	60.62	55.10	58.93	61.17	68.97

Peak Three Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	6.78	7.55	8.19	8.82	9.45	10.12
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	46.78	42.61	45.66	47.38	53.37

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	248.60	0.68	1.05	1.01	0.91	153	4,455	37.2%	
Domestic S.S. & Small Public S.S.	420.36	1.15				153	7,533	62.8%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	762.85	2.09	N/A	N/A	N/A				N/A

Total 1,431.81 3.92 11,988 0

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	262.50	0.72	1.11	1.07	0.96	164	4,382	36.8%	
Self-supplied Domestic	451.32	1.24				164	7,534	63.2%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,208.15	3.31	N/A	5.81	5.14				939

Total 1,921.97 5.27 11,916 939

2005 Water Use Projection

2000 Water Ose Frojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	302.38	0.83	1.28	1.23	1.10	177	4,689	37.1%	
Self-supplied Domestic	512.80	1.40				177	7,952	62.9%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,286.99	3.53	N/A	6.19	5.47				1,000

Total 2,102.17 5.76 12,641 1,000

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	342.25	0.94	1.45	1.39	1.25	187	5,003	37.3%	
Self-supplied Domestic	575.11	1.58				187	8,407	62.7%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,407.81	3.86	N/A	6.80	6.02				1,099
Total	2,325.17	6.37					13,410		1,099

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	382.12	1.05	1.62	1.56	1.39	197	5,324	37.4%	
Self-supplied Domestic	638.85	1.75				197	8,901	62.6%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,514.75	4.15	N/A	7.29	6.44				1,177
Total	2,535.72	6.95					14,225		1,177

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	422.00	1.16	1.78	1.72	1.54	205	5,637	37.4%	
Self-supplied Domestic	707.68	1.94				205	9,453	62.6%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,656.37	4.54	N/A	7.97	7.04				1,287

Total 2,786.05 7.63 15,090 1,287

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.68	0.72	0.83	0.94	1.05	1.16
Self-supplied Domestic	1.15	1.24	1.40	1.58	1.75	1.94
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	2.09	3.31	3.53	3.86	4.15	4.54

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.05	1.11	1.28	1.45	1.62	1.78
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.01	1.07	1.23	1.39	1.56	1.72
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	5.81	6.19	6.80	7.29	7.97

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.91	0.96	1.10	1.25	1.39	1.54
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	5.14	5.47	6.02	6.44	7.04

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.54	1.54	1.54	1.54	1.54
Peak Month	1.49	1.49	1.49	1.49	1.49
Peak 3 Month	1.33	1.33	1.33	1.33	1.33

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Blountstown (LIN)	212.50	221.26	253.05	284.83	316.61	348.40
Altha (LIN)	36.10	41.24	49.33	57.42	65.51	73.60
Total	248.60	262.50	302.38	342.25	382.12	422.00

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Blountstown (LIN)	0.58	0.61	0.69	0.78	0.87	0.95
Altha (LIN)	0.10	0.11	0.14	0.16	0.18	0.20
Total	0.68	0.72	0.83	0.94	1.05	1.16

Public Supply Ratios

	Maximum	Peak	Peak 3	
	Day	Month	Month	
Blountstown (LIN)	1.54	1.50	1.33	
Altha (LIN)	1.56	1.42	1.31	

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Blountstown (LIN)	0.93	1.07	1.20	1.34	1.47
Altha (LIN)	0.18	0.21	0.25	0.28	0.31
Total	1.11	1.28	1.45	1.62	1.78

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Blountstown (LIN)	0.91	1.04	1.17	1.30	1.43
Altha (LIN)	0.16	0.19	0.22	0.25	0.29
Total	1.07	1.23	1.39	1.56	1.72

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Blountstown (LIN)	0.81	0.92	1.04	1.16	1.27
Altha (LIN)	0.15	0.18	0.21	0.24	0.26
Total	0.96	1.10	1.25	1.39	1.54

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Calhoun County	37%	37%	37%	37%	37%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Blountstown (LIN)	3,771	4,061	4,352	4,642	4,932
Altha (LIN)	611	628	651	682	705
Total	4,382	4,689	5,003	5,324	5,637

Total Area Population

Year	2000	2005	2010	2015	2020
Population	11,916	12,641	13,410	14,225	15,090

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	367.30	1.01	1.84	1.30	1.18	260	3,864	22.2%	
Domestic S.S. & Small Public S.S.	1,285.26	3.52				260	13,521	77.8%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 1,744.94 4.78 17,385 162

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	391.47	1.07	1.96	1.39	1.26	268	3,997	22.7%	
Self-supplied Domestic	1,329.61	3.64				268	13,577	77.3%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 1,813.46 4.97 17,574 162

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	413.52	1.13	2.07	1.47	1.33	279	4,056	21.8%	
Self-supplied Domestic	1,479.87	4.05				279	14,516	78.2%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0.00

Total 1,985.77 5.44 18,572 162

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	427.05	1.17	2.14	1.52	1.38	285	4,110	20.9%	
Self-supplied Domestic	1,612.41	4.42				285	15,517	79.1%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	115.47	0.32							203
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	6.57	0.02	N/A	0.07	0.06				46
Total	2,161.51	5.92					19,627		249

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	435.79	1.19	2.18	1.56	1.41	287	4,161	20.1%	
Self-supplied Domestic	1,736.40	4.76				287	16,581	79.9%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	115.47	0.32							203
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	5.84	0.02	N/A	0.06	0.05				41
Total	2,293.49	6.28					20,742		244

2020 Water Use Projection

2020 Water Coo Frejootion									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	441.98	1.21	2.22	1.58	1.43	287	4,212	19.2%	
Self-supplied Domestic	1,858.20	5.09				287	17,708	80.8%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	115.47	0.32							203
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	5.48	0.02	N/A	0.06	0.05				40
Total	2,421.13	6.63					21,920		243

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.01	1.07	1.13	1.17	1.19	1.21
Self-supplied Domestic	3.52	3.64	4.05	4.42	4.76	5.09
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.25	0.25	0.25	0.32	0.32	0.32
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.00	0.00	0.00	0.02	0.02	0.02

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020			
Public Supply	1.84	1.96	2.07	2.14	2.18	2.22			
Self-supplied Domestic									
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A			
Recreational Irrigation									
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00			
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A			

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.30	1.39	1.47	1.52	1.56	1.58
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.07	0.06	0.06

Peak Three Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.18	1.26	1.33	1.38	1.41	1.43
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.06	0.05	0.05

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.82	1.83	1.83	1.83	1.83
Peak Month	1.30	1.30	1.30	1.30	1.31
Peak 3 Month	1.17	1.17	1.18	1.18	1.18

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
City of Bonifay (LOG)	342.00	360.58	379.10	389.10	394.30	396.96
City of Ponce DeLeon (LIN)	25.30	30.89	34.42	37.95	41.49	45.02
Total	367.30	391.47	413.52	427.05	435.79	441.98

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
City of Bonifay (LOG)	0.94	0.99	1.04	1.07	1.08	1.09
City of Ponce DeLeon (LIN)	0.07	0.08	0.09	0.10	0.11	0.12
Total	1.01	1.07	1.13	1.17	1.19	1.21

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
City of Bonifay	1.81	1.27	1.14
City of Ponce DeLeon	2.00	1.67	1.55

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
City of Bonifay	1.79	1.88	1.93	1.96	1.97
City of Ponce DeLeon	0.17	0.19	0.21	0.23	0.25
Total	1.96	2.07	2.14	2.18	2.22

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
City of Bonifay	1.25	1.31	1.35	1.37	1.38
City of Ponce DeLeon	0.14	0.16	0.17	0.19	0.21
Total	1.39	1.47	1.52	1.56	1.58

Public Supply: Projected Peak 3 Month in Mgal/d

		_			
Year	2000	2005	2010	2015	2020
City of Bonifay	1.13	1.18	1.22	1.23	1.24
City of Ponce DeLeon	0.13	0.15	0.16	0.18	0.19
Total	1.26	1.33	1.38	1.41	1.43

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Holmes County	23%	22%	21%	20%	19%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
City of Bonifay	3,336	3,345	3,349	3,350	3,351
City of Ponce DeLeon	661	711	761	811	861
Total	3,997	4,056	4,110	4,161	4,212

Total Area Population

Year	2000	2005	2010	2015	2020
Population	17,574	18,572		20,742	21,920

Golf Course Projections

Con Coarse i rojections	ı									
Base Year: 1995		Projected: 2000-2020 Water Use in Mgal								
Total Population	17,385		Total	Number of	Acres	Total GC				
Total Number of Holes	36	Year	Population	Holes	Irrigated	Water Use				
Holes Per Person	0.0020708	2000	17,574	36	162	92.38				
Total Number Acres Irrigated	162	2005	18,572	36	162	92.38				
Inches Per Acre	21	2010	19,627	45	203	115.47				
Total GC Water Use in Mgal	92.38	2015	20,742	45	203	115.47				
Water Use Per Hole in Mgal	2.57	2020	21,920	45	203	115.47				

Golf Course Name Holes Location

Bonifay Country Club	18	State Road 177A, Bonifay, 32425
Red Bay GC	18	Red Bay

Total 36

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	800.40	2.19	4.35	3.23	2.94	147	14,870	31.9%	
Domestic S.S. & Small Public S.S.	1,706.68	4.68				147	31,707	68.1%	
Commercial-Industrial Self-supplied	565.70	1.55	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	18,362.10	50.31	N/A	N/A	N/A				
Agricultural	3,030.23	8.30	N/A	N/A	N/A				N/A

Total 24,557.48 67.28 46,577 162

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	903.75	2.48	4.91	3.65	3.32	160	15,487	34.6%	
Self-supplied Domestic	1,706.38	4.68				160	29,240	65.4%	
Commercial-Industrial Self-supplied	565.70	1.55	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	29,306.46	80.29	N/A	N/A	N/A				
Agricultural	4,789.90	13.12	N/A	52.63	39.72				24,560

Total 37,364.57 102.37 44,727 24,722

2005 Water Use Projection

2000 Water Coc Frojection												
		Average	Maximum	Peak	Peak 3				Total			
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres			
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated			
Public Supply	978.10	2.68	5.33	3.95	3.61	167	16,081	35.2%				
Self-supplied Domestic	1,801.33	4.94				167	29,615	64.8%				
Commercial-Industrial Self-supplied	565.70	1.55	N/A	N/A	N/A							
Recreational Irrigation	92.38	0.25							162			
Power Generation	31,149.23	85.34	N/A	N/A	N/A							
Agricultural	4,211.74	11.54	N/A	46.59	35.09				22,274			

Total 38,798.48 106.30 45,696 22,436

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,054.56	2.89	5.75	4.26	3.90	172	16,796	35.6%	
Self-supplied Domestic	1,909.71	5.23				172	30,415	64.4%	
Commercial-Industrial Self-supplied	565.70	1.55	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	32,992.00	90.39	N/A	N/A	N/A				
Agricultural	4,514.69	12.37	N/A	49.51	37.33				23,583
Total	41,129.04	112.68					47,211		23,745

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,135.82	3.11	6.20	4.58	4.21	176	17,632	36.4%	
Self-supplied Domestic	1,985.54	5.44				176	30,822	63.6%	
Commercial-Industrial Self-supplied	565.70	1.55	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	32,992.00	90.39	N/A	N/A	N/A				
Agricultural	4,643.53	12.72	N/A	51.09	38.48				24,766
Total	41,414.97	113.47	_		_		48,454		24,928

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,227.74	3.36	6.70	4.95	4.55	181	18,589	37.4%	
Self-supplied Domestic	2,054.54	5.63				181	31,107	62.6%	
Commercial-Industrial Self-supplied	565.70	1.55	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	32,992.00	90.39	N/A	N/A	N/A				
Agricultural	5,250.16	14.38	N/A	57.95	43.64				28,779

Total 42,182.51 115.57 49,696 28,941

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.19	2.48	2.68	2.89	3.11	3.36
Self-supplied Domestic	4.68	4.68	4.94	5.23	5.44	5.63
Commercial-Industrial Self-supplied	1.55	1.55	1.55	1.55	1.55	1.55
Recreational Irrigation	0.25	0.25	0.25	0.25	0.25	0.25
Power Generation	50.31	80.29	85.34	90.39	90.39	90.39
Agricultural	8.30	13.12	11.54	12.37	12.72	14.38

Maximum Daily Flow in Mgal/d

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Use Category	1995	2000	2005	2010	2015	2020
Public Supply	4.35	4.91	5.33	5.75	6.20	6.70
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	N/A	N/A	N/A	N/A	N/A	N/A
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

3						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.23	3.65	3.95	4.26	4.58	4.95
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	N/A	N/A	N/A	N/A	N/A	N/A
Agricultural	N/A	52.63	46.59	49.51	51.09	57.95

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.94	3.32	3.61	3.90	4.21	4.55
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	N/A	N/A	N/A	N/A	N/A	N/A
Agricultural	N/A	39.72	35.09	37.33	38.48	43.64

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.98	1.99	1.99	1.99	1.99
Peak Month	1.47	1.47	1.47	1.47	1.47
Peak 3 Month	1.34	1.35	1.35	1.35	1.35

Public Supply: Projected Annual Flow in Mgal/yr

	5 7					
Year	1995	2000	2005	2010	2015	2020
Cottendale (GEO)	53.80	59.89	61.17	62.37	63.61	64.86
Graceville (MOD EXP)	137.50	144.05	145.60	148.51	153.96	164.17
Grand Ridge (LIN)	31.50	38.27	41.18	44.08	46.99	49.89
Greenwood (GEO)	28.00	34.54	36.13	37.79	39.53	41.35
Malone (MOD EXP)	26.50	31.38	34.58	37.44	40.00	42.29
Marianna (LIN)	430.30	501.50	564.31	627.13	689.94	752.75
Sneads (LOG)	92.80	94.12	95.13	97.24	101.79	112.43
Total	800.40	903.75	978.10	1,054.56	1,135.82	1,227.74

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Cottendale (GEO)	0.15	0.16	0.17	0.17	0.17	0.18
Graceville (MOD EXP)	0.38	0.39	0.40	0.41	0.42	0.45
Grand Ridge (LIN)	0.09	0.10	0.11	0.12	0.13	0.14
Greenwood (GEO)	0.08	0.09	0.10	0.10	0.11	0.11
Malone (MOD EXP)	0.07	0.09	0.09	0.10	0.11	0.12
Marianna (LIN)	1.18	1.37	1.55	1.72	1.89	2.06
Sneads (LOG)	0.25	0.26	0.26	0.27	0.28	0.31
Total	2.19	2.48	2.68	2.89	3.11	3.36

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Cottendale	1.74	1.71	1.30
Graceville	1.80	1.26	1.14
Grand Ridge	2.64	1.74	1.38
Greenwood	1.56	1.26	1.20
Malone	3.04	1.59	1.30
Marianna	1.97	1.45	1.41
Sneeds	2.04	1.68	1.35

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Cottendale	0.29	0.29	0.30	0.30	0.31
Graceville	0.71	0.72	0.73	0.76	0.81
Grand Ridge	0.28	0.30	0.32	0.34	0.36
Greenwood	0.15	0.15	0.16	0.17	0.18
Malone	0.26	0.29	0.31	0.33	0.35
Marianna	2.71	3.05	3.38	3.72	4.06
Sneeds	0.53	0.53	0.54	0.57	0.63
Total	4.91	5.33	5.75	6.20	6.70

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Cottendale	0.28	0.29	0.29	0.30	0.30
Graceville	0.50	0.50	0.51	0.53	0.57
Grand Ridge	0.18	0.20	0.21	0.22	0.24
Greenwood	0.12	0.12	0.13	0.14	0.14
Malone	0.14	0.15	0.16	0.17	0.18
Marianna	2.00	2.25	2.50	2.75	3.00
Sneeds	0.43	0.44	0.45	0.47	0.52
Total	3.65	3.95	4.26	4.58	4.95

Public Supply: Projected Peak 3 Month in Mgal/d

		<u> </u>			
Year	2000	2005	2010	2015	2020
Cottendale	0.21	0.22	0.22	0.23	0.23
Graceville	0.45	0.45	0.46	0.48	0.51
Grand Ridge	0.15	0.16	0.17	0.18	0.19
Greenwood	0.11	0.12	0.12	0.13	0.14
Malone	0.11	0.12	0.13	0.14	0.15
Marianna	1.94	2.19	2.43	2.67	2.92
Sneeds	0.35	0.35	0.36	0.38	0.42
Total	3.32	3.61	3.90	4.21	4.55

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Jackson County	35%	35%	36%	36%	37%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Cottendale	1,207	1,269	1,330	1,392	1,453
Graceville	2,747	2,772	2,798	2,823	2,848
Grand Ridge	734	758	783	807	831
Greenwood	652	685	718	751	784
Malone	973	982	987	991	993
Marianna	7,404	7,825	8,364	9,022	9,799
Sneeds	1,769	1,790	1,816	1,846	1,881
Total	15,487	16,081	16,796	17,632	18,589

Total Area Population

Year	2000	2005	2010	2015	2020
Population	44,727	45,696	47,211	48,454	49,696

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Blue Springs Baptist Center	10.90	10.90	10.90	10.90	10.90
FDNR: FL Caverns State Park	16.70	16.70	16.70	16.70	16.70
FDOC: Apalachee Corr. Instit.	235.30	235.30	235.30	235.30	235.30
FDOC: Dozier School	31.50	31.50	31.50	31.50	31.50
FDOC: Sunland Center	183.20	183.20	183.20	183.20	183.20
Jackson County Corr. Instit.	79.40	79.40	79.40	79.40	79.40
Marriana 76 Truck Stop	8.70	8.70	8.70	8.70	8.70
Total	565.70	565.70	565.70	565.70	565.70

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Blue Springs Baptist Center	0.03	0.03	0.03	0.03	0.03
FDNR: FL Caverns State Park	0.05	0.05	0.05	0.05	0.05
FDOC: Apalachee Corr. Instit.	0.64	0.64	0.64	0.64	0.64
FDOC: Dozier School	0.09	0.09	0.09	0.09	0.09
FDOC: Sunland Center	0.50	0.50	0.50	0.50	0.50
Jackson County Corr. Instit.	0.22	0.22	0.22	0.22	0.22
Marriana 76 Truck Stop	0.02	0.02	0.02	0.02	0.02
Total	1.55	1.55	1.55	1.55	1.55

Golf Course Projections

Base Year: 1995		Projected: 2000-2020 Water Use in Mgal					
Total Population	46,577		Total	Number of	Acres	Total GC	
Total Number of Holes	36	Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0007729	2000	44,727	36	162	92.38	
Total Number Acres Irrigated	162	2005	45,696	36	162	92.38	
Inches Per Acre	21	2010	47,211	36	162	92.38	
Total GC Water Use in Mgal	92.38	2015	48,454	36	162	92.38	
Water Use Per Hole in Mgal	2.57	2020	49,696	36	162	92.38	

Golf Course Name Holes Location

Caverns GC	9	2601 Caverns Road, Marianna, 32446
Great Oaks GC	9	U.S. Highway 90, Marianna, 32446
Magnolia Oaks GC	18	5248 Clubhouse Drive, Marianna, 32446

Total 36

Power Generation: Projected Annual Flow

Year	2000	2005	2010	2015	2020
Gulf Power-Scholtz Plant	29,306.46	31,149.23	32,992.00	32,992.00	32,992.00
Total	29,306.46	31,149.23	32,992.00	32,992.00	32,992.00

Power Generation: Projected Average Daily Flow (Mgal/d)

Year	2000	2005	2010	2015	2020
Gulf Power-Scholtz Plant	80.29	85.34	90.39	90.39	90.39
Total	80.29	85.34	90.39	90.39	90.39

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	107.00	0.29	0.60	0.46	0.37	145	2,020	29.4%	
Domestic S.S. & Small Public S.S.	257.06	0.70				145	4,853	70.6%	
Commercial-Industrial Self-supplied	88.60	0.24	N/A	N/A	N/A				
Recreational Irrigation	0.00	0.00							0
Power Generation	143.44	0.39	N/A	N/A	N/A				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A
Total	596.10	1.63					6,873		0

2000 Water Use Projection

2000 Water Coo Fregorian									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	121.66	0.33	0.68	0.52	0.43	169	1,971	29.1%	
Self-supplied Domestic	295.96	0.81				169	4,796	70.9%	
Commercial-Industrial Self-supplied	88.60	0.24	N/A	N/A	N/A				
Recreational Irrigation	0.00	0.00							0
Power Generation	143.44	0.39	N/A	N/A	N/A				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	649.66	1.78					6,767		0

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	138.59	0.38	0.78	0.60	0.49	185	2,057	27.4%	
Self-supplied Domestic	367.16	1.01				185	5,450	72.6%	
Commercial-Industrial Self-supplied	88.60	0.24	N/A	N/A	N/A				
Recreational Irrigation	0.00	0.00							0
Power Generation	143.44	0.39	N/A	N/A	N/A				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 737.79 2.02 7,507

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	155.50	0.43	0.87	0.67	0.54	198	2,152	25.8%	
Self-supplied Domestic	446.20	1.22				198	6,175	74.2%	
Commercial-Industrial Self-supplied	88.60	0.24	N/A	N/A	N/A				
Recreational Irrigation	0.00	0.00							0
Power Generation	143.44	0.39	N/A	N/A	N/A				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	833.74	2.28					8,327		0

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	172.41	0.47	0.97	0.74	0.60	209	2,255	24.4%	
Self-supplied Domestic	533.90	1.46				209	6,983	75.6%	
Commercial-Industrial Self-supplied	88.60	0.24	N/A	N/A	N/A				
Recreational Irrigation	0.00	0.00							0
Power Generation	143.44	0.39	N/A	N/A	N/A				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	938.35	2.57					9,238		0

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	189.34	0.52	1.07	0.81	0.66	219	2,370	23.1%	
Self-supplied Domestic	629.38	1.72				219	7,878	76.9%	
Commercial-Industrial Self-supplied	88.60	0.24	N/A	N/A	N/A				
Recreational Irrigation	0.00	0.00							0
Power Generation	143.44	0.39	N/A	N/A	N/A				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 1,050.76 2.88 10,248 0

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.29	0.33	0.38	0.43	0.47	0.52
Self-supplied Domestic	0.70	0.81	1.01	1.22	1.46	1.72
Commercial-Industrial Self-supplied	0.24	0.24	0.24	0.24	0.24	0.24
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.39	0.39	0.39	0.39	0.39	0.39
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020			
Public Supply	0.60	0.68	0.78	0.87	0.97	1.07			
Self-supplied Domestic									
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A			
Recreational Irrigation									
Power Generation	N/A	N/A	N/A	N/A	N/A	N/A			
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A			

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.46	0.52	0.60	0.67	0.74	0.81
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	N/A	N/A	N/A	N/A	N/A	N/A
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.37	0.43	0.49	0.54	0.60	0.66
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	N/A	N/A	N/A	N/A	N/A	N/A
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.05	2.05	2.05	2.05	2.06
Peak Month	1.57	1.57	1.57	1.56	1.56
Peak 3 Month	1.28	1.28	1.28	1.28	1.28

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
City of Bristol (LIN)	80.40	87.69	96.70	105.70	114.70	123.71
Hosford-Telogia (LIN)	26.60	33.97	41.89	49.80	57.71	65.63
Total	107.00	121.66	138.59	155.50	172.41	189.34

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
City of Bristol (LIN)	0.22	0.24	0.26	0.29	0.31	0.34
Hosford-Telogia (LIN)	0.07	0.09	0.11	0.14	0.16	0.18
Total	0.29	0.33	0.38	0.43	0.47	0.52

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Bristol	2.01	1.61	1.29
Hosford-Telogia	2.14	1.47	1.25

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Bristol	0.48	0.53	0.58	0.63	0.68
Hosford-Telogia	0.20	0.25	0.29	0.34	0.38
Total	0.68	0.78	0.87	0.97	1.07

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bristol	0.39	0.43	0.47	0.51	0.55
Hosford-Telogia	0.14	0.17	0.20	0.23	0.26
Total	0.52	0.60	0.67	0.74	0.81

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Bristol	0.31	0.34	0.37	0.40	0.44
Hosford-Telogia	0.12	0.14	0.17	0.20	0.23
Total	0.43	0.49	0.54	0.60	0.66

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Liberty County	29%	27%	26%	24%	23%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Bristol	1,534	1,560	1,587	1,614	1,642
Hosford-Telogia	438	497	565	641	728
Total	1,971	2,057	2,152	2,255	2,370

Total Area Population

Year	2000	2005	2010	2015	2020
Population	6,767	7,507	8,327	9,238	10,248

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
FDOC: Liberty Corr. Instit.	88.60	88.60	88.60	88.60	88.60
Total	88.60	88.60	88.60	88.60	88.60

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
FDOC: Liberty Corr. Instit.	0.24	0.24	0.24	0.24	0.24
Total	0.24	0.24	0.24	0.24	0.24

Power Generation: Projected Annual Flow

Year	2000	2005	2010	2015	2020
Timber Energy	143.44	143.44	143.44	143.44	143.44
Total	143.44	143.44	143.44	143.44	143.44

Power Generation: Projected Average Daily Flow (Mgal/d)

Year	2000	2005	2010	2015	2020
Timber Energy	0.39	0.39	0.39	0.39	0.39
Total	0.39	0.39	0.39	0.39	0.39

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	402.50	1.10	2.09	1.46	1.37	160	6,875	36.2%	
Domestic S.S. & Small Public S.S.	710.45	1.95				160	12,135	63.8%	
Commercial-Industrial Self-supplied	39.10	0.11	N/A	N/A	N/A				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	325.95	0.89	N/A	N/A	N/A				N/A

Total 1,547.28 4.24 19,010 122

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	464.00	1.27	2.41	1.68	1.58	169	7,523	39.1%	
Self-supplied Domestic	723.36	1.98				169	11,729	60.9%	
Commercial-Industrial Self-supplied	39.10	0.11	N/A	N/A	N/A				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	452.24	1.24	N/A	2.18	1.92				351

Total 1,747.99 4.79 19,252 473

2005 Water Use Projection

2000 Water Osci Trojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	489.28	1.34	2.53	1.77	1.67	163	8,248	40.0%	
Self-supplied Domestic	733.16	2.01				163	12,359	60.0%	
Commercial-Industrial Self-supplied	39.10	0.11	N/A	N/A	N/A				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	482.17	1.32	N/A	2.32	2.05				376

Total 1,813.00 4.97 20,607 498

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	515.08	1.41	2.66	1.86	1.75	155	9,077	41.2%	
Self-supplied Domestic	736.61	2.02				155	12,981	58.8%	
Commercial-Industrial Self-supplied	39.10	0.11	N/A	N/A	N/A				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	529.62	1.45	N/A	2.55	2.25				412
Total	1.889.70	5.18					22.058		534

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	541.60	1.48	2.80	1.95	1.84	148	10,015	42.4%	
Self-supplied Domestic	735.26	2.01				148	13,596	57.6%	
Commercial-Industrial Self-supplied	39.10	0.11	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	567.58	1.56	N/A	2.73	2.41				442
Total	1,975.91	5.41					23,611		604

2020 Water Use Projection

2020 114(0) 000 1 10,000(0)									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	569.12	1.56	2.94	2.05	1.94	141	11,056	43.7%	
Self-supplied Domestic	731.84	2.01				141	14,217	56.3%	
Commercial-Industrial Self-supplied	39.10	0.11	N/A	N/A	N/A				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	620.50	1.70	N/A	2.99	2.64				483
Total	2,052.93	5.62					25,273		645

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.10	1.27	1.34	1.41	1.48	1.56
Self-supplied Domestic	1.95	1.98	2.01	2.02	2.01	2.01
Commercial-Industrial Self-supplied	0.11	0.11	0.11	0.11	0.11	0.11
Recreational Irrigation	0.19	0.19	0.19	0.19	0.25	0.25
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.89	1.24	1.32	1.45	1.56	1.70

Maximum Daily Flow in Mgal/d

Maximum Bany 1 low in Mgana									
Use Category	1995	2000	2005	2010	2015	2020			
Public Supply	2.09	2.41	2.53	2.66	2.80	2.94			
Self-supplied Domestic									
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A			
Recreational Irrigation									
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00			
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A			

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.46	1.68	1.77	1.86	1.95	2.05
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	2.18	2.32	2.55	2.73	2.99

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.37	1.58	1.67	1.75	1.84	1.94
Self-supplied Domestic						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	1.92	2.05	2.25	2.41	2.64

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.90	1.89	1.89	1.88	1.88
Peak Month	1.32	1.32	1.32	1.31	1.31
Peak 3 Month	1.25	1.24	1.24	1.24	1.24

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Caryville (LIN)	29.40	34.60	36.49	38.39	40.29	42.19
Chipley (LIN)	271.40	323.73	347.52	371.31	395.11	418.90
Deltona (LIN)	55.90	62.69	61.07	59.46	57.85	56.23
Vernon (MOD EXP)	45.80	42.98	44.20	45.92	48.35	51.80
Total	402.50	464.00	489.28	515.08	541.60	569.12

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Caryville (LIN)	0.08	0.09	0.10	0.11	0.11	0.12
Chipley (LIN)	0.74	0.89	0.95	1.02	1.08	1.15
Deltona (LIN)	0.15	0.17	0.17	0.16	0.16	0.15
Vernon (MOD EXP)	0.13	0.12	0.12	0.13	0.13	0.14
Total	1.10	1.27	1.34	1.41	1.48	1.56

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Caryville	3.19	1.37	1.28
Chipley	1.62	1.22	1.21
Deltona	1.85	1.54	1.33
Vernon	3.00	1.75	1.38

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Caryville	0.30	0.32	0.34	0.35	0.37
Chipley	1.44	1.54	1.65	1.75	1.86
Deltona	0.32	0.31	0.30	0.29	0.29
Vernon	0.35	0.36	0.38	0.40	0.43
Total	2.41	2.53	2.66	2.80	2.94

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Caryville	0.13	0.14	0.14	0.15	0.16
Chipley	1.08	1.16	1.24	1.32	1.40
Deltona	0.27	0.26	0.25	0.24	0.24
Vernon	0.21	0.21	0.22	0.23	0.25
Total	1.68	1.77	1.86	1.95	2.05

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Caryville	0.12	0.13	0.13	0.14	0.15
Chipley	1.07	1.15	1.23	1.31	1.39
Deltona	0.23	0.22	0.22	0.21	0.20
Vernon	0.16	0.17	0.17	0.18	0.20
Total	1.58	1.67	1.75	1.84	1.94

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Washington County	39%	40%	41%	42%	44%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Caryville	704	748	792	837	881
Chipley	4,823	5,352	5,986	6,727	7,573
Deltona	1,033	1,148	1,263	1,379	1,494
Vernon	964	1,000	1,036	1,072	1,108
Total	7,523	8,248	9,077	10,015	11,056

Total Area Population

Year	2000	2005	2010	2015	2020
Population	19,252	20,607	22,058	23,611	25,273

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
FDOC: Washington Corr. Instit.	39.10	39.10	39.10	39.10	39.10
Total	39.10	39.10	39.10	39.10	39.10

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
FDOC: Washington Corr. Instit.	0.11	0.11	0.11	0.11	0.11
Total	0.11	0.11	0.11	0.11	0.11

Golf Course Projections

Base Year: 1995			Projected: 2000-2020 Water Use in Mgal						
Total Population	19,010			Total	Number of	Acres	Total GC		
Total Number of Holes	27		Year	Population	Holes	Irrigated	Water Use		
Holes Per Person	0.0014203		2000	19,252	27	122	69.28		
Total Number Acres Irrigated	122		2005	20,607	27	122	69.28		
Inches Per Acre	21		2010	22,058	27	122	69.28		
Total GC Water Use in Mgal	69.28		2015	23,611	36	162	92.38		
Water Use Per Hole in Mgal	2.57		2020	25,273	36	162	92.38		

Golf Course Name Holes Location

Falling Waters CC	9	Falling Waters Drive, Chipley, 32428
Sunny Hills Golf & CC	18	1150 Country Club Blvd., Sunny Hills, 32428

Total 27

Appendix 7.

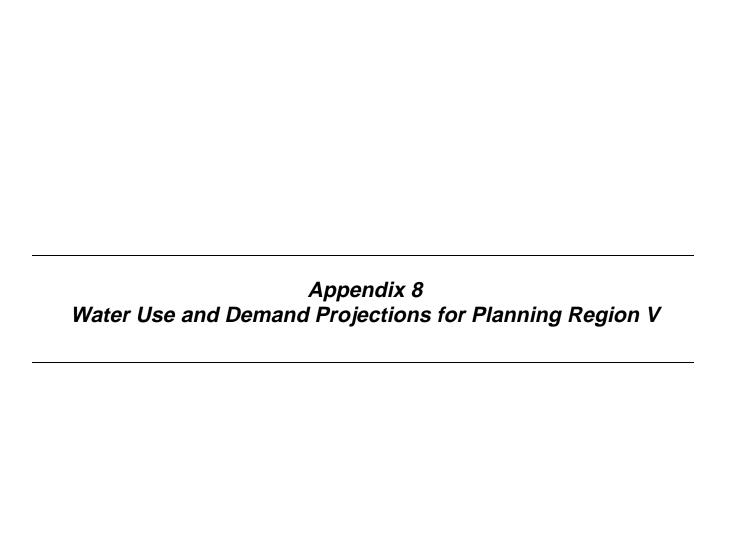
Planning Region IV

c. Individually Projected Users

Projections in Mgal/d

								•	
County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020
Calhoun	Altha, town of			PS	0.11	0.14	0.16	0.18	0.20
Calhoun	Blountstown, city of			PS	0.61	0.69	0.78	0.87	0.95
Holmes	Bonifay, city of			PS	0.99	1.04	1.07	1.08	1.09
Holmes	Ponce DeLeon, town of			PS	0.08	0.09	0.10	0.11	0.12
Jackson	Cottondale, town of			PS	0.16	0.17	0.17	0.17	0.18
Jackson	Graceville, city of			PS	0.39	0.40	0.41	0.42	0.45
Jackson	Grandridge, city of			PS	0.10	0.11	0.12	0.13	0.14
Jackson	Greenwood, town of			PS	0.09	0.10	0.10	0.11	0.11
Jackson	Malone, town of			PS	0.09	0.09	0.10	0.11	0.12
Jackson	Marianna, city of			PS	1.37	1.55	1.72	1.89	2.06
Jackson	Sneads, town of			PS	0.26	0.26	0.27	0.28	0.31
Jackson	Gulf Power	Scholtz Plant		PWR	80.29	85.34	90.39	90.39	90.39
Liberty	Bristol, city of			PS	0.24	0.26	0.29	0.31	0.34
Liberty	Hosford-Telogia Water System	١		PS	0.09	0.11	0.14	0.16	0.18
Liberty	Timber Energy			PWR	0.39	0.39	0.39	0.39	0.39
Washington	Carryville, town of			PS	0.09	0.10	0.11	0.11	0.12
Washington	Chipley, city of			PS	0.89	0.95	1.02	1.08	1.15
Washington	Deltona/Sunny Hills	Southern States Utilitie	es	PS	0.17	0.17	0.16	0.16	0.15
Washington	Vernon Water System			PS	0.12	0.12	0.13	0.13	0.14

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.



Appendix 8. Planning Region V a. System Inventory

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Alligator Point W/S		Franklin	3	PS	0.12	Floridan aquifer	100		
Apalacicola, city of		Franklin	3	PS	0.7	Floridan aquifer	100		
Carrabelle, town of		Franklin	3	PS	0.17	Floridan aquifer	100		
East Point Water System		Franklin	3	PS	0.21	Floridan aquifer	100		
Lanark Village		Franklin	3	PS	0.2	Floridan aquifer	100		
St. George Island Utilities		Franklin	3	PS	0.34	Floridan aquifer	100		
Arizona Chemical	Gulf County Plant	Gulf	2	C-I	0.57	Floridan aquifer	100		
Florida Coast Paper		Gulf	2	C-I	27.98	Chipola River	100		
Florida Dept. of Corrections	Gulf Correctional Instit.	Gulf		C-I	0.16	Floridan aquifer	100		
Lighthouse Utilities	Cape San Blas	Gulf	2	PS	0.11	Floridan aquifer	100		
Port St. Joe, city of		Gulf	2	PS	1.04	Floridan aquifer	50	Surficial aquifer	50
Wewahitchcka, town of		Gulf		PS	0.13	Floridan aquifer	100		
St. Joseph's Bay Country Club		Gulf	2	R-I	0.13	Stormwater Runoff	70	Floridan aquifer	30
Highland View W/S	_	Gulf	2	SPS	N/A	City of Port St. Joe	100	_	
St. Joe Beach W/S		Gulf	2	SPS	N/A	City of Port St. Joe	100	_	

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 8.

Planning Region V b. Projection summary tables

The following projections were prepared by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the Northwest Florida Water Management District. These projections are for planning purposes only.

Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; Northwest Florida Water Management District; Bureau of Economic and Business Research; and individual utilities.

Footnotes and Specific Utility Projection Information: Franklin County

- The Gulf County NonASC-2 per capita was used for Franklin County NonASC-3 to calculate Domestic self supply and small public supply systems water use. The per capita was then multiplied by the population in Franklin County NonASC-3 to produce the Domestic self-supply and small sublic supply systems water use.

Planning Region V Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,103.80	3.02	6.08	4.32	3.86	151	20,034	85.2%	
Domestic S.S. & Small Public S.S.	135.19	0.37				107	3,473	14.8%	
Commercial-Industrial Self-supplied	10,475.18	28.70	41.06	33.24	32.28				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 11,780.15 32.27 23,507 81

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,210.90	3.32	6.68	4.75	4.24	157	21,112	86.0%	
Domestic S.S & Small Public S.S.	140.72	0.39				112	3,427	14.0%	
Commercial-Industrial Self-supplied	10,461.43	28.66	41.06	33.24	32.28				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 11,879.03 32.55 24,539 81

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,308.50	3.58	7.28	5.16	4.61	153	23,478	86.9%	
Domestic S.S & Small Public S.S.	141.45	0.39				109	3,542	13.1%	
Commercial-Industrial Self-supplied	10,474.21	28.70	41.12	33.29	32.32				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 11,990.14 32.85 27,020 81

Planning Region V Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,395.61	3.82	7.76	5.52	4.92	147	26,057	86.3%	
Domestic S.S & Small Public S.S.	166.44	0.46				111	4,120	13.7%	
Commercial-Industrial Self-supplied	10,486.98	28.73	41.17	33.33	32.36				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	12,115.02	33.19					30,177		81

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,520.88	4.17	8.54	6.05	5.39	142	29,248	85.4%	
Domestic S.S & Small Public S.S.	216.11	0.59				119	4,993	14.6%	
Commercial-Industrial Self-supplied	10,496.11	28.76	41.21	33.36	32.39				
Recreational Irrigation	98.98	0.27							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	12,332.07	33.79					34,241		122

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,633.23	4.47	9.20	6.51	5.80	139	32,279	81.6%	
Domestic S.S & Small Public S.S.	334.89	0.92				126	7,279	18.4%	
Commercial-Industrial Self-supplied	10,505.23	28.78	41.25	33.39	32.42				
Recreational Irrigation	98.98	0.27							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 12,572.32 34.44 39,558 122

Planning Region V Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.02	3.32	3.58	3.82	4.17	4.47
Domestic S.S & Small Public S.S.	0.37	0.39	0.39	0.46	0.59	0.92
Commercial-Industrial Self-supplied	28.70	28.66	28.70	28.73	28.76	28.78
Recreational Irrigation	0.18	0.18	0.18	0.18	0.27	0.27
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

marini 2 any 1 ani in gara											
Use Category	1995	2000	2005	2010	2015	2020					
Public Supply	6.08	6.68	7.28	7.76	8.54	9.20					
Domestic S.S & Small Public S.S.	-	-	-	-	-	-					
Commercial-Industrial Self-supplied	41.06	41.06	41.12	41.17	41.21	41.25					
Recreational Irrigation											
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00					
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A					

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	4.32	4.75	5.16	5.52	6.05	6.51
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	33.24	33.24	33.29	33.33	33.36	33.39
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.86	4.24	4.61	4.92	5.39	5.80
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	32.28	32.28	32.32	32.36	32.39	32.42
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Franklin County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	634.50	1.74	3.58	2.60	2.30	175	9,926	97.0%	
Domestic S.S. & Small Public S.S.	10.53	0.03				93	310	3.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 645.03 1.77 10,236 0

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	716.11	1.96	4.05	2.94	2.60	184	10,680	94.9%	
Domestic S.S & Small Public S.S.	24.49	0.07				117	571	5.1%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 740.60 2.03 11,251 0

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	794.22	2.18	4.50	3.26	2.88	180	12,060	94.7%	
Domestic S.S & Small Public S.S.	30.22	0.08				122	678	5.3%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 824.44 2.26 12,738 0

Franklin County Summary

2010 Water Use Projection

·		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	865.68	2.37	4.86	3.54	3.14	174	13,626	93.1%	
Domestic S.S & Small Public S.S.	49.31	0.14				134	1,008	6.9%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	914.99	2.51					14,634		0

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	960.79	2.63	5.45	3.96	3.50	167	15,796	92.7%	
Domestic S.S & Small Public S.S.	64.75	0.18				142	1,252	7.3%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	1,025.54	2.81					17,048		0

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,049.89	2.88	5.96	4.32	3.82	162	17,777	88.3%	
Domestic S.S & Small Public S.S.	129.77	0.36				151	2,349	11.7%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	1,179.66	3.23					20,126		0

Franklin County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.74	1.96	2.18	2.37	2.63	2.88
Domestic S.S & Small Public S.S.	0.03	0.07	0.08	0.14	0.18	0.36
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

maximum 2 amy 1 to 11 mm gan, a						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.58	4.05	4.50	4.86	5.45	5.96
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.60	2.94	3.26	3.54	3.96	4.32
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.30	2.60	2.88	3.14	3.50	3.82
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Franklin County ASC-3 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	634.50	1.74	3.58	2.60	2.30	175	9,926	99.4%	
Domestic S.S. & Small Public S.S.	3.84	0.01				175	60	0.6%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	638.34	1.75					9,986		0

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	716.11	1.96	4.05	2.94	2.60	184	10,680	97.9%	
Domestic S.S & Small Public S.S.	15.67	0.04				184	234	2.1%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	731.78	2.00					10,913		0

2005 Water Use Projection

2003 Water Ose Projection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	794.22	2.18	4.50	3.26	2.88	180	12,060	97.6%	
Domestic S.S & Small Public S.S.	19.45	0.05				180	295	2.4%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 813.67 2.23 12,356

Franklin County ASC-3 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	865.68	2.37	4.86	3.54	3.14	174	13,626	96.0%	
Domestic S.S & Small Public S.S.	36.13	0.10				174	569	4.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 901.81 2.47 14,195 0

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	960.79	2.63	5.45	3.96	3.50	167	15,796	95.5%	
Domestic S.S & Small Public S.S.	45.02	0.12				167	740	4.5%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,005.81 2.76 16,537 0

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,049.89	2.88	5.96	4.32	3.82	162	17,777	91.1%	
Domestic S.S & Small Public S.S.	103.09	0.28				162	1,746	8.9%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 1,152.98 3.16 19,522 0

Franklin County ASC-3 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.74	1.96	2.18	2.37	2.63	2.88
Domestic S.S & Small Public S.S.	0.01	0.04	0.05	0.10	0.12	0.28
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.58	4.05	4.50	4.86	5.45	5.96
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.60	2.94	3.26	3.54	3.96	4.32
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.30	2.60	2.88	3.14	3.50	3.82
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Franklin County ASC-3 Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.06	2.07	2.05	2.07	2.07
Peak Month	1.50	1.50	1.49	1.50	1.50
Peak 3 Month	1.32	1.33	1.32	1.33	1.33

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Alligator Point (LIN)			51.52			
Apalachicola (GEO)	256.00	290.58	317.44	346.78	378.84	413.85
Carrabelle (MOD)	60.90	65.03	65.03	65.03	65.03	65.03
East Point (GEO)	77.10	94.49	108.52	122.54	136.57	150.60
Lanark Village (GEO)	72.20	81.29	89.62	98.81	108.93	120.09
St. George Island (LIN)	125.90	138.10	162.09	186.09	210.09	234.09
Total	634.50	716.11	794.22	865.68	960.79	1,049.89

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Alligator Point (LIN)	0.12	0.13	0.14	0.13	0.17	0.18
Apalachicola (GEO)	0.70	0.80	0.87	0.95	1.04	1.13
Carrabelle (MOD)	0.17	0.18	0.18	0.18	0.18	0.18
East Point (GEO)	0.21	0.26	0.30	0.34	0.37	0.41
Lanark Village (GEO)	0.20	0.22	0.25	0.27	0.30	0.33
St. George Island (LIN)	0.34	0.38	0.44	0.51	0.58	0.64
Total	1.74	1.96	2.18	2.37	2.63	2.88

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Alligator Point	3.73	2.14	1.57
Apalachicola	1.41	1.28	1.19
Carrabelle	2.22	1.43	1.25
East Point	2.26	1.53	1.18
Lanark Village	2.69	1.80	1.60
St. George Island	2.29	1.57	1.48

Franklin County ASC-3 Summary

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Alligator Point	0.48	0.53	0.47	0.63	0.68
Apalachicola	1.12	1.23	1.34	1.46	1.60
Carrabelle	0.40	0.40	0.40	0.40	0.40
East Point	0.59	0.67	0.76	0.85	0.93
Lanark Village	0.60	0.66	0.73	0.80	0.89
St. George Island	0.87	1.02	1.17	1.32	1.47
Total	4.05	4.50	4.86	5.45	5.96

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Alligator Point	0.27	0.30	0.27	0.36	0.39
Apalachicola	1.02	1.11	1.22	1.33	1.45
Carrabelle	0.26	0.26	0.26	0.26	0.26
East Point	0.40	0.45	0.51	0.57	0.63
Lanark Village	0.40	0.44	0.49	0.54	0.59
St. George Island	0.59	0.70	0.80	0.90	1.01
Total	2.94	3.26	3.54	3.96	4.32

Public Supply: Projected Peak 3 Month in Mgal/d

		<u> </u>			
Year	2000	2005	2010	2015	2020
Alligator Point	0.20	0.22	0.20	0.26	0.29
Apalachicola	0.95	1.04	1.13	1.24	1.35
Carrabelle	0.22	0.22	0.22	0.22	0.22
East Point	0.31	0.35	0.40	0.44	0.49
Lanark Village	0.36	0.39	0.43	0.48	0.53
St. George Island	0.56	0.66	0.76	0.85	0.95
Total	2.60	2.88	3.14	3.50	3.82

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Franklin County ASC-3	98%	98%	96%	96%	91%

Franklin County ASC-3 Summary

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Alligator Point	1,046	1,080	1,116	1,153	1,192
Apalachicola	3,821	4,658	5,676	7,375	8,755
Carrabelle	1,339	1,377	1,417	1,458	1,500
East Point	1,442	1,710	1,758	1,804	1,852
Lanark Village	1,247	1,406	1,585	1,788	2,016
St. George Island	1,785	1,829	2,074	2,218	2,462
Total	10,680	12,060	13,626	15,796	17,777

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	97%	97%	97%	97%	97%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	10,913	12,356	14,195	16,537	19,522

Franklin NonASC-3 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	0.00	0.00	0.00	0.00	0.00	0	0	0.0%	
Domestic S.S. & Small Public S.S.	6.70	0.02				73	250	100.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	6.70	0.02					250		0

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	0.00	0.00	0.00	0.00	0.00	0	0	0.0%	
Domestic S.S & Small Public S.S.	8.82	0.02				72	338	100.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	8.82	0.02					338		0

2005 Water Use Projection

2000 Water Ose i Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	0.00	0.00	0.00	0.00	0.00	0	0	0.0%	
Domestic S.S & Small Public S.S.	10.77	0.03				77	382	100.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	10.77	0.03					382		0

Franklin NonASC-3 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	0.00	0.00	0.00	0.00	0.00	0	0	0.0%	
Domestic S.S & Small Public S.S.	13.18	0.04				82	439	100.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	13.18	0.04					439		0

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	0.00	0.00	0.00	0.00	0.00	0	0	0.0%	
Domestic S.S & Small Public S.S.	19.73	0.05				106	511	100.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	19.73	0.05	_				511		0

2020 Water Use Projection

2020 Water Ode i Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	0.00	0.00	0.00	0.00	0.00	0	0	0.0%	
Domestic S.S & Small Public S.S.	26.68	0.07				121	604	100.0%	
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	26.68	0.07					604		0

Franklin NonASC-3 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
Domestic S.S & Small Public S.S.	0.02	0.02	0.03	0.04	0.05	0.07
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

maximum Bany 1 low in mgana						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.00	0.00	0.00	0.00	0.00	0.00
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	N/A	N/A	N/A	N/A	N/A	N/A
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Gulf County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	469.30	1.29	2.50	1.72	1.56	127	10,108	76.2%	
Domestic S.S. & Small Public S.S.	124.65	0.34				108	3,163	23.8%	
Commercial-Industrial Self-supplied	10,475.18	28.70	41.06	33.24	32.28				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A

Total 11,135.12 30.51 13,271 81

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	494.79	1.36	2.63	1.81	1.65	130	10,432	78.5%	
Domestic S.S & Small Public S.S.	116.23	0.32				111	2,856	21.5%	
Commercial-Industrial Self-supplied	10,461.43	28.66	41.06	33.24	32.28				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 11,138.43 30.52 13,288 81

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	514.28	1.41	2.78	1.90	1.72	123	11,418	79.9%	
Domestic S.S & Small Public S.S.	111.23	0.30				106	2,864	20.1%	
Commercial-Industrial Self-supplied	10,474.21	28.70	41.12	33.29	32.32				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 11,165.70 30.59 14,282 81

Gulf County Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	529.93	1.45	2.90	1.97	1.78	117	12,431	80.0%	
Domestic S.S & Small Public S.S.	117.13	0.32				103	3,112	20.0%	
Commercial-Industrial Self-supplied	10,486.98	28.73	41.17	33.33	32.36				
Recreational Irrigation	65.98	0.18	0.00	0.00	0.00				81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	11,200.03	30.69					15,543		81

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	560.09	1.53	3.09	2.09	1.89	114	13,452	78.2%	
Domestic S.S & Small Public S.S.	151.36	0.41				111	3,741	21.8%	
Commercial-Industrial Self-supplied	10,496.11	28.76	41.21	33.36	32.39				
Recreational Irrigation	98.98	0.27							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	11,306.53	30.98					17,193		122

2020 Water Use Projection

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		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	583.34	1.60	3.24	2.19	1.98	110	14,502	74.6%	
Domestic S.S & Small Public S.S.	205.11	0.56				114	4,930	25.4%	
Commercial-Industrial Self-supplied	10,505.23	28.78	41.25	33.39	32.42				
Recreational Irrigation	98.98	0.27							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	11,392.66	31.21			•	•	19,432		122

Gulf County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.29	1.36	1.41	1.45	1.53	1.60
Domestic S.S & Small Public S.S.	0.34	0.32	0.30	0.32	0.41	0.56
Commercial-Industrial Self-supplied	28.70	28.66	28.70	28.73	28.76	28.78
Recreational Irrigation	0.18	0.18	0.18	0.18	0.27	0.27
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	0.00	0.00	0.00	0.00	0.00	0.00

Maximum Daily Flow in Mgal/d

maximam Bany Flow in mgara						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.50	2.63	2.78	2.90	3.09	3.24
Domestic S.S & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	41.06	41.06	41.12	41.17	41.21	41.25
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.72	1.81	1.90	1.97	2.09	2.19
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	33.24	33.24	33.29	33.33	33.36	33.39
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.56	1.65	1.72	1.78	1.89	1.98
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	32.28	32.28	32.32	32.36	32.39	32.42
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	0.00	0.00	0.00	0.00	0.00

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	420.50	1.15	2.21	1.54	1.40	139	8,287	83.3%	
Domestic S.S. & Small Public S.S.	84.54	0.23				139	1,666	16.7%	
Commercial-Industrial Self-supplied	10,418.30	28.54	40.82	33.04	32.10				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 10,989.32 30.11 9,953 81

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	441.56	1.21	2.32	1.62	1.47	144	8,394	84.2%	
Domestic S.S & Small Public S.S.	82.69	0.23				144	1,572	15.8%	
Commercial-Industrial Self-supplied	10,404.55	28.51	40.82	33.04	32.10				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 10,994.79 30.12 9,966 81

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	453.06	1.24	2.42	1.68	1.51	134	9,246	86.3%	
Domestic S.S & Small Public S.S.	71.81	0.20				134	1,466	13.7%	
Commercial-Industrial Self-supplied	10,417.33	28.54	40.88	33.08	32.14				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A

Total 11,008.18 30.16 10,712 81

Gulf ASC-2 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	460.72	1.26	2.49	1.72	1.54	125	10,126	86.9%	
Domestic S.S & Small Public S.S.	69.67	0.19				125	1,531	13.1%	
Commercial-Industrial Self-supplied	10,430.10	28.58	40.93	33.13	32.18				
Recreational Irrigation	65.98	0.18							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	11,026.47	30.21					11,657		81

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	465.98	1.28	2.55	1.75	1.57	116	11,013	85.4%	
Domestic S.S & Small Public S.S.	79.62	0.22				116	1,882	14.6%	
Commercial-Industrial Self-supplied	10,439.23	28.60	40.97	33.16	32.21				
Recreational Irrigation	98.98	0.27							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	11,083.80	30.37					12,895		122

2020 Water Use Projection

								1	
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	469.68	1.29	2.58	1.77	1.58	108	11,930	81.9%	
Domestic S.S & Small Public S.S.	104.09	0.29				108	2,644	18.1%	
Commercial-Industrial Self-supplied	10,448.35	28.63	41.01	33.19	32.24				
Recreational Irrigation	98.98	0.27							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	11,121.10	30.47					14,574		122

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.15	1.21	1.24	1.26	1.28	1.29
Domestic S.S & Small Public S.S.	0.23	0.23	0.20	0.19	0.22	0.29
Commercial-Industrial Self-supplied	28.54	28.51	28.54	28.58	28.60	28.63
Recreational Irrigation	0.18	0.18	0.18	0.18	0.27	0.27
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.21	2.32	2.42	2.49	2.55	2.58
Domestic S.S & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.54	1.62	1.68	1.72	1.75	1.77
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.40	1.47	1.51	1.54	1.57	1.58
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.92	1.95	1.98	1.99	2.01
Peak Month	1.34	1.35	1.36	1.37	1.38
Peak 3 Month	1.21	1.22	1.22	1.23	1.23

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Lighthouse Utilities (MOD EXP)	41.80	47.09	53.57	58.55	62.38	65.32
Port Saint Joe (MOD EXP)	378.70	394.47	399.49	402.17	403.60	404.36
Total	420.50	441.56	453.06	460.72	465.98	469.68

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Lighthouse Utilities (MOD EXP)	0.11	0.13	0.15	0.16	0.17	0.18
Port Saint Joe (MOD EXP)	1.04	1.08	1.09	1.10	1.11	1.11
Total	1.15	1.21	1.24	1.26	1.28	1.29

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Lighthouse Utilities	4.35	2.45	1.75
Port Saint Joe	1.63	1.21	1.15

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Lighthouse Utilities	0.56	0.64	0.70	0.74	0.78
Port Saint Joe	1.76	1.78	1.80	1.80	1.81
Total	2.32	2.42	2.49	2.55	2.58

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Lighthouse Utilities	0.32	0.36	0.39	0.42	0.44
Port Saint Joe	1.30	1.32	1.33	1.33	1.34
Total	1.62	1.68	1.72	1.75	1.77

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Lighthouse Utilities		0.26	0.28	0.30	0.31
Port Saint Joe		1.26	1.26	1.27	1.27
Total	1.47	1.51	1.54	1.57	1.58

Percent Served by Public Supply

, , , , , , , , , , , , , , , , , , , ,	,				
Year	2000	2005	2010	2015	2020
Gulf ASC-2	84%	86%	87%	85%	82%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Lighthouse Utilities	1,590	1,815	2,010	2,150	2,250
Port Saint Joe	6,804	7,431	8,116	8,863	9,680
Total	8,394	9,246	10,126	11,013	11,930

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	75%	75%	75%	75%	75%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	9,966	10,712	11,657	12,895	14,574

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Arizona Chemical	193.45	206.23	219.00	228.13	237.25
Florida Coast Paper	10211.10	10211.10	10211.10	10211.10	10211.10
Total	10404.55	10417.33	10430.10	10439.23	10448.35

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Arizona Chemical	0.53	0.57	0.60	0.63	0.65
Florida Coast Paper	27.98	27.98	27.98	27.98	27.98
Total	28.51	28.54	28.58	28.60	28.63

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Arizona Chemical	1.54	1.27	1.19
Florida Coast Paper	1.43	1.16	1.13
Total	2.97	2.42	2.31

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Arizona Chemical	0.82	0.87	0.92	0.96	1.00
Florida Coast Paper	40.01	40.01	40.01	40.01	40.01
Total	40.82	40.88	40.93	40.97	41.01

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Arizona Chemical	0.67	0.72	0.76	0.79	0.82
Florida Coast Paper	32.37	32.37	32.37	32.37	32.37
Total	33.04	33.08	33.13	33.16	33.19

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Arizona Chemical	0.63	0.67	0.71	0.74	0.77
Florida Coast Paper	31.47	31.47	31.47	31.47	31.47
Total	32.10	32.14	32.18	32.21	32.24

Golf Course Projections

Base Year: 1995	Projected: 2000-2020 Water Use in Mgal						
Total Population	9,953		Total	Number of	Acres	Total GC	
Total Number of Holes	18	Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0018085	2000	9,966	18	81	65.98	
Total Number Acres Irrigated	81	2005	10,712	18	81	65.98	
Inches Per Acre	30	2010	11,657	18	81	65.98	
Total GC Water Use in Mgal	65.98	2015	12,895	27	122	98.98	
Water Use Per Hole in Mgal	3.67	2020	14,574	27	122	98.98	

Golf Course Name		Holes	Location
Saint Josephs Bay CC		18	CR 30 South, Port St. Joe, 32456
	Total	18	

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	48.80	0.13	0.28	0.18	0.17	73	1,821	54.9%	
Domestic S.S. & Small Public S.S.	40.12	0.11				73	1,497	45.1%	
Commercial-Industrial Self-supplied	56.88	0.16	0.24	0.20	0.18				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	145.80	0.40					3,318		0

2000 Water Use Projection

2000 Water Coo Frejection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	53.23	0.15	0.31	0.19	0.18	72	2,038	61.3%	
Domestic S.S & Small Public S.S.	33.54	0.09				72	1,284	38.7%	
Commercial-Industrial Self-supplied	56.88	0.16	0.24	0.20	0.18				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	143.65	0.39					3,322		0

2005 Water Use Projection

·		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	61.22	0.17	0.36	0.22	0.21	77	2,172	60.8%	
Domestic S.S & Small Public S.S.	39.42	0.11				77	1,399	39.2%	
Commercial-Industrial Self-supplied	56.88	0.16	0.24	0.20	0.18				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	157.52	0.43					3,571		0

Gulf NonASC-2 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	69.21	0.19	0.40	0.25	0.24	82	2,305	59.3%	
Domestic S.S & Small Public S.S.	47.46	0.13				82	1,581	40.7%	
Commercial-Industrial Self-supplied	56.88	0.16	0.24	0.20	0.18				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	173.55	0.48					3,886		0

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	94.11	0.26	0.55	0.34	0.33	106	2,439	56.7%	
Domestic S.S & Small Public S.S.	71.74	0.20				106	1,859	43.3%	
Commercial-Industrial Self-supplied	56.88	0.16	0.24	0.20	0.18				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	222.73	0.61					4,298		0

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	113.66	0.31	0.66	0.41	0.39	121	2,572	52.9%	
Domestic S.S & Small Public S.S.	101.02	0.28				121	2,286	47.1%	
Commercial-Industrial Self-supplied	56.88	0.16	0.24	0.20	0.18				
Recreational Irrigation	0.00	0.00							0
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	271.56	0.74					4,858		0

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.13	0.15	0.17	0.19	0.26	0.31
Domestic S.S & Small Public S.S.	0.11	0.09	0.11	0.13	0.20	0.28
Commercial-Industrial Self-supplied	0.16	0.16	0.16	0.16	0.16	0.16
Recreational Irrigation	0.00	0.00	0.00	0.00	0.00	0.00
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

maximum 2 amy 1 to 11 mm gan, a						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.28	0.31	0.36	0.40	0.55	0.66
Domestic S.S & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	0.24	0.24	0.24	0.24	0.24	0.24
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.18	0.19	0.22	0.25	0.34	0.41
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.20	0.20	0.20	0.20	0.20	0.20
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.17	0.18	0.21	0.24	0.33	0.39
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.18	0.18	0.18	0.18	0.18	0.18
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Gulf NonASC-2 Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.12	2.12	2.12	2.12	2.12
Peak Month	1.32	1.32	1.32	1.32	1.32
Peak 3 Month	1.26	1.26	1.26	1.26	1.26

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Wewahitchcka (LIN)	48.80	53.23	61.22	69.21	94.11	113.66
Total	48.80	53.23	61.22	69.21	94.11	113.66

Public Supply: Projected Average Daily Flow in Mgal/d

	 					
Year	1995	2000	2005	2010	2015	2020
Wewahitchcka (LIN)	0.13	0.15	0.17	0.19	0.26	0.31
Total	0.13	0.15	0.17	0.19	0.26	0.31

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Wewahitchcka	2.12	1.32	1.26

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Wewahitchcka	0.31	0.36	0.40	0.55	0.66
Total	0.31	0.36	0.40	0.55	0.66

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Wewahitchcka	0.19	0.22	0.25	0.34	0.41
Total	0.19	0.22	0.25	0.34	0.41

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Wewahitchcka	0.18	0.21	0.24	0.33	0.39
Total	0.18	0.21	0.24	0.33	0.39

Percent Served by Public Supply

	,				
Year	2000	2005	2010	2015	2020
Gulf NonASC-2	61%	61%	59%	57%	53%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Wewahitchcka (LIN)	2,038	2,172	2,305	2,439	2,572
Total	2,038	2,172	2,305	2,439	2,572

Total Area Population

Year	2000	2005	2010	2015	2020
Population	3,322	3,571	3,886	4,298	4,858

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Gulf Correctional Facility	56.88	56.88	56.88	56.88	56.88
Total	56.88	56.88	56.88	56.88	56.88

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

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Year	2000	2005	2010	2015	2020						
Gulf Correctional Facility	0.16	0.16	0.16	0.16	0.16						
Total	0.16	0.16	0.16	0.16	0.16						

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Gulf Correctional Facility	1.55	1.30	1.13
Total	1.55	1.30	1.13

Gulf NonASC-2 Summary

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Gulf Correctional Facility	0.24	0.24	0.24	0.24	0.24
Total	0.24	0.24	0.24	0.24	0.24

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Gulf Correctional Facility	0.20	0.20	0.20	0.20	0.20
Total	0.20	0.20	0.20	0.20	0.20

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Gulf Correctional Facility	0.18	0.18	0.18	0.18	0.18
Total	0.18	0.18	0.18	0.18	0.18

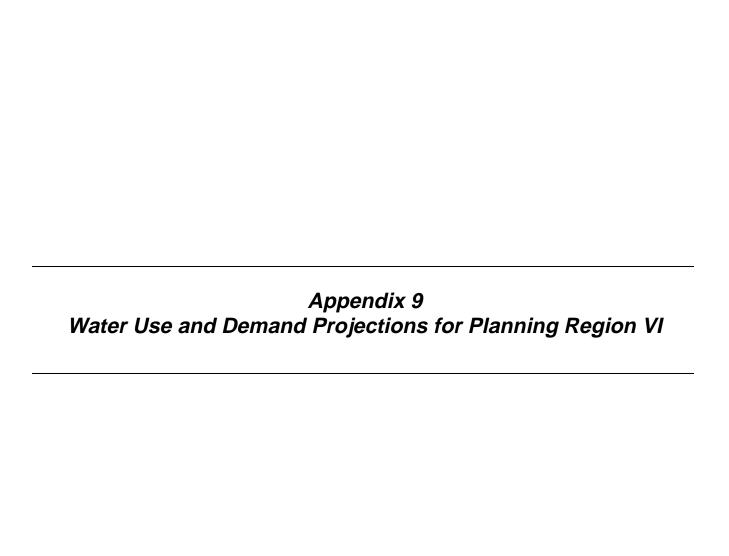
Appendix 8. Planning Region V

c. Individually Projected Users

Projections in Mgal/d

				_					
County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020
Franklin	Alligator Point W/S		3	PS	0.13	0.14	0.13	0.17	0.18
Franklin	Apalacicola, city of		3	PS	0.80	0.87	0.95	1.04	1.13
Franklin	Carrabelle, town of		3	PS	0.18	0.18	0.18	0.18	0.18
Franklin	East Point Water System		3	PS	0.26	0.30	0.34	0.37	0.41
Franklin	Lanark Village		3	PS	0.22	0.25	0.27	0.30	0.33
Franklin	St. George Island Utilities		3	PS	0.38	0.44	0.51	0.58	0.64
Gulf	Arizona Chemical	Gulf County Plant	2	C-I	0.53	0.57	0.60	0.63	0.65
Gulf	Florida Coast Paper		2	C-I	27.98	27.98	27.98	27.98	27.98
Gulf	Lighthouse Utilities	Cape San Blas	2	PS	0.13	0.15	0.16	0.17	0.18
Gulf	Port St. Joe, city of		2	PS	1.08	1.09	1.10	1.11	1.11
Gulf	Wewahitchcka, town of			PS	0.15	0.17	0.19	0.26	0.31

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.



Appendix 9. Planning Region VI a. System Inventory

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
FDOC: Gadsden Corr.		Gadsden	5	C-I	0.01	Floridan aquifer	N/A		
FDOC: Lively Law Center		Gadsden	5	C-I	0.81	Floridan aquifer	N/A		
FDOC: State Hospital		Gadsden	5	C-I	0.01	Floridan aquifer	N/A		
FDOT: I-10 Rest Stop		Gadsden	5	C-I	0.00	Floridan aquifer	N/A		
Quincy Farms		Gadsden	5	C-I	0.21	Floridan aquifer	N/A		
Chattahochee, city of		Gadsden		PS	0.91	Floridan aquifer	100		
Greensboro, town of		Gadsden	5	PS	0.08	Floridan aquifer	100		
Gretna, town of		Gadsden	5	PS	0.25	Floridan aquifer	100		
Havana, town of		Gadsden		PS	0.58	Floridan aquifer	100		
Quincy, city of		Gadsden	5	PS	1.44	Quincy Creek	99	Floridan aquifer	
Talquin Electric Coop.	Gadsden Regional	Gadsden	5	PS	0.54	Floridan aquifer	100		
Havana Golf & Country Club		Gadsden		R-I	N/A	N/A	N/A		
Gadson Country Club		Gadsden	5	R-I	N/A	N/A	N/A		
Seminole Vally Golf Course		Gadsden		R-I	N/A	N/A	N/A		
Joyland Subdivision		Gadsden		SPS	0.02	Floridan aquifer	100		
Rentz MHP		Gadsden		SPS	0.01	Floridan aquifer	100		
Talquin Electric Coop.	Jamison	Gadsden		SPS	0.01	Floridan aquifer	100		
Talquin Electric Coop.	St. James	Gadsden		SPS	0.01	Floridan aquifer	100	<u> </u>	

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 9. Planning Region VI
b. Projection summary tables
The following projections were preparied by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the Northwest Florida Water Management District. These projections are for planning purposes only.
Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; Northwest Florida Water Management District; Bureau of Economic and Business Research; and individual utilities.

Region VI Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,384.30	3.79	8.73	5.13	4.51	128	29,619	66.2%	
Domestic S.S. & Small Public S.S.	801.56	2.20				145	15,115	33.8%	
Commercial-Industrial Self-supplied	373.85	1.02	2.00	1.55	1.43				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,911.14	5.24	N/A	N/A	N/A				N/A
Total	4,562.61	12.50					44,734		161

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,339.48	3.67	8.34	4.96	4.33	126	29,227	65.0%	
Domestic S.S & Small Public S.S.	712.82	1.95				124	15,755	35.0%	
Commercial-Industrial Self-supplied	381.88	1.05	2.04	1.58	1.46				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,335.64	6.40	N/A	15.74	13.21				3,410
T (.1	4 004 50	40.00	•	•	•	•	44.000	•	0.574

Total 4,861.58 13.32 44,982 3,571

2005 Water Use Projection

2000 Water Ode i Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,403.25	3.84	8.71	5.20	4.52	128	29,933	64.3%	
Domestic S.S & Small Public S.S.	774.64	2.12				128	16,624	35.7%	
Commercial-Industrial Self-supplied	386.11	1.06	2.06	1.59	1.47				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,095.83	5.74	N/A	12.00	10.37				2,500

Total 4,751.59 13.02 46,557 2,661

Region VI Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,468.31	4.02	9.09	5.45	4.71	133	30,340	62.7%	
Domestic S.S & Small Public S.S.	870.19	2.38				132	18,032	37.3%	
Commercial-Industrial Self-supplied	390.35	1.07	2.08	1.61	1.49				
Recreational Irrigation	91.76	0.25	0.00	0.00	0.00				161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,396.96	6.57	N/A	14.34	12.28				2,987
Total	5,217.57	14.29					48,372		3,148

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,533.26	4.20	9.47	5.69	4.90	137	30,604	60.7%	
Domestic S.S & Small Public S.S.	991.90	2.72				137	19,822	39.3%	
Commercial-Industrial Self-supplied	395.00	1.08	2.10	1.63	1.50				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,425.06	6.64	N/A	13.63	11.81				2,797
Total	5.436.98	14.90					50.426		2.958

2020 Water Use Projection

2020 Water Coo i Tojootion									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,598.78	4.38	9.85	5.94	5.10	142	30,810	58.4%	
Domestic S.S & Small Public S.S.	1,136.65	3.11				142	21,909	41.6%	
Commercial-Industrial Self-supplied	399.66	1.09	2.12	1.64	1.52				
Recreational Irrigation	114.86	0.31							201
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,509.74	6.88	N/A	13.15	11.56				2,680
Total	5,759.68	15.78					52,719		2,881

Region VI Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.79	3.67	3.84	4.02	4.20	4.38
Domestic S.S & Small Public S.S.	2.20	1.95	2.12	2.38	2.72	3.11
Commercial-Industrial Self-supplied	1.02	1.05	1.06	1.07	1.08	1.09
Recreational Irrigation	0.25	0.25	0.25	0.25	0.25	0.31
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	5.24	6.40	5.74	6.57	6.64	6.88

Maximum Daily Flow in Mgal/d

maximan Bany How in mgara						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	8.73	8.34	8.71	9.09	9.47	9.85
Domestic S.S & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	2.00	2.04	2.06	2.08	2.10	2.12
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

<u> </u>						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.13	4.96	5.20	5.45	5.69	5.94
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.55	1.58	1.59	1.61	1.63	1.64
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	15.74	12.00	14.34	13.63	13.15

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	4.51	4.33	4.52	4.71	4.90	5.10
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.43	1.46	1.47	1.49	1.50	1.52
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	13.21	10.37	12.28	11.81	11.56

Gadsden County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,384.30	3.79	8.73	5.13	4.51	128	29,619	66.2%	
Domestic S.S. & Small Public S.S.	801.56	2.20				145	15,115	33.8%	
Commercial-Industrial Self-supplied	373.85	1.02	2.00	1.55	1.43				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,911.14	5.24	N/A	N/A	N/A				N/A
Total	4,562.61	12.50					44,734		161

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,339.48	3.67	8.34	4.96	4.33	126	29,227	65.0%	
Domestic S.S & Small Public S.S.	712.82	1.95				124	15,755	35.0%	
Commercial-Industrial Self-supplied	381.88	1.05	2.04	1.58	1.46				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,335.64	6.40	N/A	15.74	13.21				3,410

Total 4,861.58 13.32 44,982 3,571

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,403.25	3.84	8.71	5.20	4.52	128	29,933	64.3%	
Domestic S.S & Small Public S.S.	774.64	2.12				128	16,624	35.7%	
Commercial-Industrial Self-supplied	386.11	1.06	2.06	1.59	1.47				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,095.83	5.74	N/A	12.00	10.37				2,500

Total 4,751.59 13.02 46,557 2,661

Gadsden County Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,468.31	4.02	9.09	5.45	4.71	133	30,340	62.7%	
Domestic S.S & Small Public S.S.	870.19	2.38				132	18,032	37.3%	
Commercial-Industrial Self-supplied	390.35	1.07	2.08	1.61	1.49				
Recreational Irrigation	91.76	0.25	0.00	0.00	0.00				161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,396.96	6.57	N/A	14.34	12.28				2,987
Total	5,217.57	14.29					48,372		3,148

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,533.26	4.20	9.47	5.69	4.90	137	30,604	60.7%	
Domestic S.S & Small Public S.S.	991.90	2.72				137	19,822	39.3%	
Commercial-Industrial Self-supplied	395.00	1.08	2.10	1.63	1.50				
Recreational Irrigation	91.76	0.25							161
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,425.06	6.64	N/A	13.63	11.81				2,797
Total	5.436.98	14.90					50.426		2.958

2020 Water Use Projection

	Average	Maximum	Peak	Peak 3				Total
Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
1,598.78	4.38	9.85	5.94	5.10	142	30,810	58.4%	
1,136.65	3.11				142	21,909	41.6%	
399.66	1.09	2.12	1.64	1.52				
114.86	0.31							201
0.00	0.00	0.00	0.00	0.00				
2,509.74	6.88	N/A	13.15	11.56				2,680
	in Mgal 1,598.78 1,136.65 399.66 114.86 0.00	Total Flow in Mgal /d 1,598.78 4.38 1,136.65 3.11 399.66 1.09 114.86 0.31 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d 1,598.78 4.38 9.85 1,136.65 3.11 399.66 1.09 2.12 114.86 0.31 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d 1,598.78 4.38 9.85 5.94 1,136.65 3.11 399.66 1.09 2.12 1.64 114.86 0.31 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Month in Mgal/d 1,598.78 4.38 9.85 5.94 5.10 1,136.65 3.11 399.66 1.09 2.12 1.64 1.52 114.86 0.31 0.00 0.00 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d 1,598.78 4.38 9.85 5.94 5.10 142 1,136.65 3.11 142 1.52 399.66 1.09 2.12 1.64 1.52 114.86 0.31 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d Population served 1,598.78 4.38 9.85 5.94 5.10 142 30,810 1,136.65 3.11 142 21,909 399.66 1.09 2.12 1.64 1.52 114.86 0.31 0.00 0.00 0.00	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Per Capita in gal/d Population Served Percent Population Served 1,598.78 4.38 9.85 5.94 5.10 142 30,810 58.4% 1,136.65 3.11 142 21,909 41.6% 399.66 1.09 2.12 1.64 1.52 114.86 0.31 0.00 0.00 0.00 0.00 0.00

Total 5,759.68 15.78 52,719 2,881

Gadsden County Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.79	3.67	3.84	4.02	4.20	4.38
Domestic S.S & Small Public S.S.	2.20	1.95	2.12	2.38	2.72	3.11
Commercial-Industrial Self-supplied	1.02	1.05	1.06	1.07	1.08	1.09
Recreational Irrigation	0.25	0.25	0.25	0.25	0.25	0.31
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	5.24	6.40	5.74	6.57	6.64	6.88

Maximum Daily Flow in Mgal/d

Maximum Bany 1 low in Mgara											
Use Category	1995	2000	2005	2010	2015	2020					
Public Supply	8.73	8.34	8.71	9.09	9.47	9.85					
Domestic S.S & Small Public S.S.		-	-	-	-	-					
Commercial-Industrial Self-supplied	2.00	2.04	2.06	2.08	2.10	2.12					
Recreational Irrigation											
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00					
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A					

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	5.13	4.96	5.20	5.45	5.69	5.94
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.55	1.58	1.59	1.61	1.63	1.64
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	15.74	12.00	14.34	13.63	13.15

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	4.51	4.33	4.52	4.71	4.90	5.10
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.43	1.46	1.47	1.49	1.50	1.52
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	13.21	10.37	12.28	11.81	11.56

Gadsden ASC-5 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	842.10	2.31	4.97	3.14	2.72	103	22,408	71.6%	
Domestic S.S. & Small Public S.S.	334.68	0.92				103	8,906	28.4%	
Commercial-Industrial Self-supplied	76.65	0.21	0.37	0.28	0.27				
Recreational Irrigation	46.19	0.13							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,299.62	3.56					31,314		81

2000 Water Use Projection

2000 Trator Oco i rojoction									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	903.94	2.48	5.34	3.37	2.89	115	21,500	63.7%	
Domestic S.S & Small Public S.S.	514.49	1.41				115	12,237	36.3%	
Commercial-Industrial Self-supplied	84.68	0.23	0.41	0.31	0.30				
Recreational Irrigation	46.19	0.13							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,549.31	4.24					33,737		81

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	973.94	2.67	5.75	3.63	3.10	120	22,187	63.5%	
Domestic S.S & Small Public S.S.	558.86	1.53				120	12,731	36.5%	
Commercial-Industrial Self-supplied	88.91	0.24	0.43	0.32	0.31				
Recreational Irrigation	46.19	0.13							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,667.90	4.57					34,918		81

Gadsden ASC-5 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,044.32	2.86	6.17	3.90	3.31	127	22,567	62.2%	
Domestic S.S & Small Public S.S.	634.55	1.74				127	13,712	37.8%	
Commercial-Industrial Self-supplied	93.15	0.26	0.45	0.34	0.33				
Recreational Irrigation	46.19	0.13							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,818.21	4.98					36,279		81

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,115.09	3.06	6.58	4.16	3.52	134	22,792	60.3%	
Domestic S.S & Small Public S.S.	735.25	2.01				134	15,028	39.7%	
Commercial-Industrial Self-supplied	97.80	0.27	0.47	0.36	0.35				
Recreational Irrigation	46.19	0.13							81
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,994.33	5.46					37,820		81

2020 Water Use Projection

2020 Water Ode i Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	1,186.26	3.25	7.00	4.42	3.73	142	22,941	58.0%	
Domestic S.S & Small Public S.S.	858.24	2.35				142	16,598	42.0%	
Commercial-Industrial Self-supplied	102.46	0.28	0.50	0.37	0.36				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	2,216.24	6.07					39,539		122

Gadsden ASC-5 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.31	2.48	2.67	2.86	3.06	3.25
Domestic S.S & Small Public S.S.	0.92	1.41	1.53	1.74	2.01	2.35
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation	0.13	0.13	0.13	0.13	0.13	0.19
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

Maximum Dany 1 low in Migara									
Use Category	1995	2000	2005	2010	2015	2020			
Public Supply	4.97	5.34	5.75	6.17	6.58	7.00			
Domestic S.S & Small Public S.S.		-	-	-	-	-			
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00			
Recreational Irrigation									
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00			
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A			

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.14	3.37	3.63	3.90	4.16	4.42
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.72	2.89	3.10	3.31	3.52	3.73
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	0.00	0.00	0.00	0.00	0.00	0.00
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

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Gadsden ASC-5 Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.16	2.16	2.16	2.16	2.15
Peak Month	1.36	1.36	1.36	1.36	1.36
Peak 3 Month	1.17	1.16	1.16	1.15	1.15

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Greensboro (GEO)	30.10	28.43	29.65	30.92	32.25	33.63
Gretna (LIN)	89.60	89.38	88.98	88.58	88.17	87.77
Quincy (GEO)	525.40	510.49	523.44	536.72	550.34	564.30
Talquin-Gadsden Regnl (LIN)	197.00	275.64	331.87	388.10	444.33	500.56
Total	842.10	903.94	973.94	1,044.32	1,115.09	1,186.26

Public Supply: Projected Average Daily Flow in Mgal/d

	<u>, , , , , , , , , , , , , , , , , , , </u>					
Year	1995	2000	2005	2010	2015	2020
Greensboro (GEO)	0.08	0.08	0.08	0.08	0.09	0.09
Gretna (LIN)	0.25	0.24	0.24	0.24	0.24	0.24
Quincy (GEO)	1.44	1.40	1.43	1.47	1.51	1.55
Talquin-Gadsden Regnl (LIN)	0.54	0.76	0.91	1.06	1.22	1.37
Total	2.31	2.48	2.67	2.86	3.06	3.25

Public Supply Ratios

	Maximum	Peak	Peak 3	
	Day	Month	Month	
Greensboro	2.29	1.58	1.37	
Gretna	2.42	1.37	1.18	
Quincy	2.10	1.35	1.21	
Talquin-Gadsden Regional	2.16	1.36	1.06	

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Gadsden ASC-5 Summary

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Greensboro	0.18	0.19	0.19	0.20	0.21
Gretna	0.59	0.59	0.59	0.58	0.58
Quincy	2.94	3.01	3.09	3.17	3.25
Talquin-Gadsden Regional	1.63	1.96	2.30	2.63	2.96
Total	5.34	5.75	6.17	6.58	7.00

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Greensboro	0.12	0.13	0.13	0.14	0.15
Gretna	0.34	0.33	0.33	0.33	0.33
Quincy	1.89	1.93	1.98	2.03	2.08
Talquin-Gadsden Regional	1.03	1.24	1.45	1.66	1.87
Total	3.37	3.63	3.90	4.16	4.42

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Greensboro	0.11	0.11	0.12	0.12	0.13
Gretna	0.29	0.29	0.29	0.28	0.28
Quincy	1.70	1.74	1.78	1.83	1.87
Talquin-Gadsden Regional	0.80	0.96	1.12	1.29	1.45
Total	2.89	3.10	3.31	3.52	3.73

Percent Served by Public Supply

	,				
Year	2000	2005	2010	2015	2020
Gadsden ASC-5	64%	64%	62%	60%	58%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Greensboro	757	763	769	775	781
Gretna	1,746	1,746	1,746	1,746	1,746
Quincy	9,520	9,593	9,667	9,741	9,816
Talquin-Gadsden Regional	9,477	10,085	10,385	10,530	10,598
Total	21,500	22,187	22,567	22,792	22,941

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Gadsden ASC-5 Summary

Percentage of County Population in Area

Year	2000	2005	2010	2015	2020
Percent	75%	75%	75%	75%	75%

Total Area Population

Year	2000	2005	2010	2015	2020
Population	33,737	34,918	36,279	37,820	39,539

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Quincy Farms (UTIL)	84.68	88.91	93.15	97.80	102.46
Total	84.68	88.91	93.15	97.80	102.46

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Quincy Farms (UTIL)	0.23	0.24	0.26	0.27	0.28
Total	0.23	0.24	0.26	0.27	0.28

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Quincy Farms	1.77	1.33	1.29
Total	1.77	1.33	1.29

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Quincy Farms	0.41	0.43	0.45	0.47	0.50
Total	0.41	0.43	0.45	0.47	0.50

Gadsden ASC-5 Summary

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Quincy Farms	0.31	0.32	0.34	0.36	0.37
Total	0.31	0.32	0.34	0.36	0.37

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Quincy Farms	0.30	0.31	0.33	0.35	0.36
Total	0.30	0.31	0.33	0.35	0.36

Golf Course Projections

Base Year: 1995		Projected: 20	000-2020 Wat	er Use in Mg	al	
Total Population	31,314		Total	Number of	Acres	Total GC
Total Number of Holes	18	Year	Population	Holes	Irrigated	Water Use
Holes Per Person	0.0005748	2000	33,737	18	81	46.19
Total Number Acres Irrigated	81	2005	34,918	18	81	46.19
Inches Per Acre	21	2010	36,279	18	81	46.19
Total GC Water Use in Mgal	46.19	2015	37,820	18	81	46.19
Water Use Per Hole in Mgal	2.57	2020	39,539	27	122	69.28

Golf Course Name		Holes	Location
Gadson Country Club		18	Solomon Dairy Rd, Quincy, 32353
	Total	18	

Gadsden NonASC-5 Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	542.20	1.49	3.76	1.99	1.80	206	7,211	53.7%	
Domestic S.S. & Small Public S.S.	466.87	1.28				206	6,209	46.3%	
Commercial-Industrial Self-supplied	297.20	0.81	1.63	1.27	1.16				
Recreational Irrigation	45.57	0.12							80
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,351.85	3.70					13,420		80

2000 Water Use Projection

2000 Trator Oco i rojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	435.54	1.19	3.00	1.59	1.44	154	7,727	68.7%	
Domestic S.S & Small Public S.S.	198.32	0.54				154	3,519	31.3%	
Commercial-Industrial Self-supplied	297.20	0.81	1.63	1.27	1.16				
Recreational Irrigation	45.57	0.12							80
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	976.64	2.68					11,246		80

2005 Water Use Projection

2000 Water Ode i Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	429.31	1.18	2.96	1.57	1.42	152	7,746	66.6%	
Domestic S.S & Small Public S.S.	215.78	0.59				152	3,893	33.4%	
Commercial-Industrial Self-supplied	297.20	0.81	1.63	1.27	1.16				
Recreational Irrigation	45.57	0.12							80
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	987.86	2.71					11,639		80

Gadsden NonASC-5 Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	423.99	1.16	2.93	1.55	1.40	149	7,773	64.3%	
Domestic S.S & Small Public S.S.	235.64	0.65				149	4,320	35.7%	
Commercial-Industrial Self-supplied	297.20	0.81	1.63	1.27	1.16				
Recreational Irrigation	45.57	0.12							80
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1.002.40	2.75					12.093		80

2015 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	418.17	1.15	2.89	1.53	1.38	147	7,812	62.0%	
Domestic S.S & Small Public S.S.	256.65	0.70				147	4,795	38.0%	
Commercial-Industrial Self-supplied	297.20	0.81	1.63	1.27	1.16				
Recreational Irrigation	45.57	0.12							80
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,017.59	2.79					12,607		80

2020 Water Use Projection

2020 Water Ode i Tojection									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	412.52	1.13	2.85	1.51	1.36	144	7,869	59.7%	
Domestic S.S & Small Public S.S.	278.41	0.76				144	5,311	40.3%	
Commercial-Industrial Self-supplied	297.20	0.81	1.63	1.27	1.16				
Recreational Irrigation	45.57	0.12							80
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	N/A	N/A	N/A	N/A	N/A				N/A
Total	1,033.70	2.83					13,180		80

Gadsden NonASC-5 Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.49	1.19	1.18	1.16	1.15	1.13
Domestic S.S & Small Public S.S.	1.28	0.54	0.59	0.65	0.70	0.76
Commercial-Industrial Self-supplied	0.81	0.81	0.81	0.81	0.81	0.81
Recreational Irrigation	0.12	0.12	0.12	0.12	0.12	0.12
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Maximum Daily Flow in Mgal/d

maximam Bany 1 low in mgara						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	3.76	3.00	2.96	2.93	2.89	2.85
Domestic S.S & Small Public S.S.		-	-	-	-	-
Commercial-Industrial Self-supplied	1.63	1.63	1.63	1.63	1.63	1.63
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.99	1.59	1.57	1.55	1.53	1.51
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.27	1.27	1.27	1.27	1.27	1.27
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.80	1.44	1.42	1.40	1.38	1.36
Domestic S.S & Small Public S.S.						
Commercial-Industrial Self-supplied	1.16	1.16	1.16	1.16	1.16	1.16
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

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Gadsden NonASC-5 Summary

Area Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.51	2.52	2.52	2.52	2.52
Peak Month	1.34	1.34	1.34	1.34	1.34
Peak 3 Month	1.21	1.21	1.21	1.21	1.21

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Chattahoochee (MOD)	330.60	240.79	240.79	241.50	241.52	241.52
Havana (GEO)	211.60	194.75	188.52	182.49	176.65	171.00
Total	542.20	435.54	429.31	423.99	418.17	412.52

Note: Chattahoochee water use in 1996 was 214.90 Mgal/yr.

Public Supply: Projected Average Daily Flow in Mgal/d

Year	1995	2000	2005	2010	2015	2020
Chattahoochee (MOD)	0.91	0.66	0.66	0.66	0.66	0.66
Havana (GEO)	0.58	0.53	0.52	0.50	0.48	0.47
Total	1.49	1.19	1.18	1.16	1.15	1.13

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Chattahoochee	2.63	1.36	1.24
Havana	2.37	1.31	1.16

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Chattahoochee	1.74	1.74	1.74	1.74	1.74
Havana	1.26	1.22	1.18	1.15	1.11
Total	3.00	2.96	2.93	2.89	2.85

Gadsden NonASC-5 Summary

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Chattahoochee	0.90	0.90	0.90	0.90	0.90
Havana	0.70	0.67	0.65	0.63	0.61
Total	1.59	1.57	1.55	1.53	1.51

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Chattahoochee	0.82	0.82	0.82	0.82	0.82
Havana	0.62	0.60	0.58	0.56	0.54
Total	1.44	1.42	1.40	1.38	1.36

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Gadsden NonASC-5	69%	67%	64%	62%	60%

Population Served by Utility

· opanamen contra a j cumi					
Supplier	2000	2005	2010	2015	2020
Chattahoochee (MOD)	3,869	3,888	3,915	3,954	4,011
Havana (MOD)	3,858	3,858	3,858	3,858	3,858
Total	7,727	7,746	7,773	7,812	7,869

Total Area Population

Year	2000	2005	2010	2015	2020
Population	11,246	11,639	12,093	12,607	13,180

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Florida State Hospital (UTIL)	297.20	297.20	297.20	297.20	297.20
Total	297.20	297.20	297.20	297.20	297.20

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Gadsden NonASC-5 Summary

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Florida State Hospital (UTIL)	0.81	0.81	0.81	0.81	0.81
Total	0.81	0.81	0.81	0.81	0.81

Commercial-Industrial Ratios

Ratios	Maximum	Peak	Peak 3
	Day	Month	Month
Florida State Hospital	2.00	1.56	1.42
Total	2.00	1.56	1.42

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Florida State Hospital	1.63	1.63	1.63	1.63	1.63
Total	1.63	1.63	1.63	1.63	1.63

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Florida State Hospital	1.27	1.27	1.27	1.27	1.27
Total	1.27	1.27	1.27	1.27	1.27

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Florida State Hospital	1.16	1.16	1.16	1.16	1.16
Total	1.16	1.16	1.16	1.16	1.16

Golf Course Projections

Base Year: 1995	Projected: 2000-2020 Water Use in Mgal						
Total Population	13,420		Total	Number of	Acres	Total GC	
Total Number of Holes	18	Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0013413	2000	11,246	18	80	45.57	
Total Number Acres Irrigated	80	2005	11,639	18	80	45.57	
Inches Per Acre	21	2010	12,093	18	80	45.57	
Total GC Water Use in Mgal	45.57	2015	12,607	18	80	45.57	
Water Use Per Hole in Mgal	2.53	2020	13,180	18	80	45.57	

Gadsden NonASC-5 Summary

Golf Course Name	Holes	Location
Havana Golf & Country Club	9	Havana
Seminole Vally Golf Course	9	Main St., FL State Hsptl Grnds, Chatttahoochee, 32324
T-1-1	40	_

Total 18

21

Appendix 9.

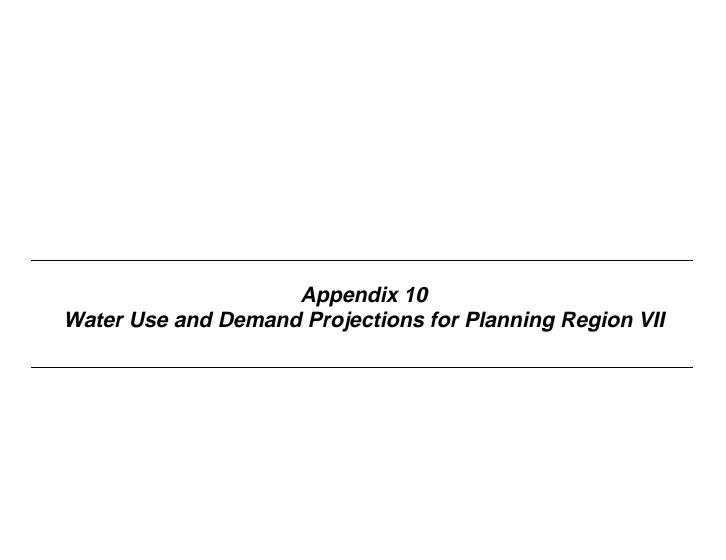
Planning Region VI

c. Individually Projected Users

Projections in Mgal/d

County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020
Gadsden	Quincy Farms		5	C-I	0.23	0.24	0.26	0.27	0.28
Gadsden	Chattahochee, city of			PS	0.66	0.66	0.66	0.66	0.66
Gadsden	Greensboro, town of		5	PS	0.08	0.08	0.08	0.09	0.09
Gadsden	Gretna, town of		5	PS	0.24	0.24	0.24	0.24	0.24
Gadsden	Havana, town of			PS	0.53	0.52	0.50	0.48	0.47
Gadsden	Quincy, city of		5	PS	1.40	1.43	1.47	1.51	1.55
Gadsden	Talquin Electric Coop.	Gadsden Regional	5	PS	0.76	0.91	1.06	1.22	1.37

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.



Appendix 10. Planning Region VII a. System Inventory

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Aucilla Christian School		Jefferson		C-I	0.01	Floridan aquifer	100		
Big Bend Truck Stop		Jefferson		C-I	0.02	Floridan aquifer	100		
Florida Dept. of Corrections	Jefferson Correctional	Jefferson		C-I	0.16	Floridan aquifer	100		
Florida Dept. of Transportation	I-10 Rest Area	Jefferson		C-I	0.01	Floridan aquifer	100		
Jefferson County Kennel Club		Jefferson		C-I	0.03	Floridan aquifer	100		
Jefferson County Nursing Home		Jefferson		C-I	0.01	Floridan aquifer	100		
Lloydd Water System		Jefferson		PS	0.00	Floridan aquifer	100		
Monticello, city of		Jefferson		PS	0.70	Floridan aquifer	100		
Jefferson County Country Club		Jefferson		R-I	0.03	N/A	N/A		
Tartaruga Creek Golf Club		Jefferson		R-I	0.20	Floridan aquifer	100		
Seminole Inn		Leon		C-I	0.01	Floridan aquifer	100		
U.S. Department of Justice	Federal Correctional	Leon		C-I	0.21	Floridan aquifer	100		
Tallahassee, city of	Main & Woodville	Leon		PS	25.32	Floridan aquifer	100		
Talquin Electric Coop	Bradfordville Regional	Leon		PS	0.79	Floridan aquifer	100		
Talquin Electric Coop	Lake Jackson Regional	Leon		PS	1.17	Floridan aquifer	100		
Talquin Electric Coop	Meadows at Wood Run	Leon		PS	0.32	Floridan aquifer	100		
Talquin Electric Coop	Pineridge Estates	Leon		PS	0.06	Floridan aquifer	100		
Tallahassee, City of	Hopkins Power Plant	Leon		PWR	2.64	Floridan aquifer	100		
Capital City Country Club	Capital City Golf	Leon		R-I	0.09	Floridan aquifer	100		
Cross Creek Golf Course		Leon		R-I	N/A	N/A	N/A		
Golden Eagle Country Club	Golden Eagle Golf	Leon		R-I	0.11	Unnamed pond	100		
Killearn Country Club	Killearn Golf Course	Leon		R-I	0.13	Floridan aquifer	95	Unnamed pond	5
Seminole Golf Club	Seminole Golf	Leon		R-I	0.11	N/A	N/A		
Summerbroke	Summerbroke Golf	Leon		R-I	0.11	Unnamed pond	100		
Heilman Golf Course	Tallahassee, City of	Leon		R-I	0.12	Unnamed pond	100	Floridan aquifer	SB
Gaither Golf Course	Tallahassee, City of	Leon		R-I	0.11	N/A	N/A		
Deertree Hills MHP		Leon		SPS	0.03	Floridan aquifer	100		
Lake Bradford MHP		Leon		SPS	0.03	Floridan aquifer	100		
Rowe Drilling/Utilities	Bucklake Estates	Leon		SPS	0.02	Floridan aquifer	100		
Rowe Drilling/Utilities	Brewster	Leon		SPS	0.03	Floridan aquifer	100		
Rowe Drilling/Utilities	Meadow Hills	Leon		SPS	0.04	Floridan aquifer	100		
Rowe Drilling/Utilities	North Lake Meadows	Leon		SPS	0.02	Floridan aquifer	100		
Rowe Drilling/Utilities	Plantation Estates	Leon		SPS	0.05	Floridan aquifer	100		
Rowe Drilling/Utilities	Sedgefield	Leon		SPS	0.03	Floridan aquifer	100		
Southern Bell MHP		Leon		SPS	0.02	Floridan aquifer	100		
Spencer Subdivision		Leon		SPS	0.02	Floridan aquifer	100		
Talquin Electric Coop	Annawood	Leon		SPS	0.01	Floridan aquifer	100		

1995 water use

					Average	Primary	Percent	Secondary	Percent
Utility/Owner	Plant/facility	County	ASC	Use	Day in Mgal	Water Source	used	Water Source	used
Talquin Electric Coop	Burgess Circle	Leon		SPS	0.01	Floridan aquifer	100		
Talquin Electric Coop	Kiper	Leon		SPS	0.01	Floridan aquifer	100		
Talquin Electric Coop	Heartwood Hills	Leon		SPS	0.01	Floridan aquifer	100		
Talquin Electric Coop	Leon East Regional	Leon		SPS	0.10	Floridan aquifer	100		
Talquin Electric Coop	Leon South Regional	Leon		SPS	0.07	Floridan aquifer	100		
Talquin Electric Coop	Leon West Regional	Leon		SPS	0.15	Floridan aquifer	100		
Talquin Electric Coop	Meridian Hills	Leon		SPS	0.03	Floridan aquifer	100		
Talquin Electric Coop	Stonegate	Leon		SPS	0.02	Floridan aquifer	100		
Primex Technologies	Primex Corporation	Wakulla		C-I	0.63	Floridan aquifer	N/A		
Panacea Water System		Wakulla		PS	0.23	Floridan aquifer	100		
Sopchoppy, Town of		Wakulla		PS	0.44	Floridan aquifer	100		
St. Marks, Town of		Wakulla		PS	0.10	Floridan aquifer	100		
Talquin Electric Coop	Gulf Coast	Wakulla		PS	0.28	Floridan aquifer	100		
Tallahassee, City of	Pudom Power Plant	Wakulla		PWR	69.13	St. Marks River	99.7	Floridan aquifer	0.3
Wildwood Country Club	Wildwood Golf	Wakulla		R-I	0.15	N/A	N/A		
Mysterious Water W/S		Wakulla		SPS	0.01	Floridan aquifer	100		

Data description; Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.

Appendix 10.

Planning Region VII b. Projection summary tables

The following projections were prepaired by the U. S. Geological Survey-Water Resources Division (Tallahassee, Florida,1998) for the Northwest Florida Water Management District. These projections are for planning purposes only.

Data Sources: U.S. Geological Survey-WRD; Florida Department of Environmental Protection; Northwest Florida Water Management District; Bureau of Economic and Business Research; and individual utilities.

Footnotes and Specific Utility Projection Information: <u>Jefferson County</u>

- Projections include the entire County, which includes the NWFWMD portion and the SRWMD portion.

Region VII Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,733.60	29.41	47.14	37.69	34.14	147	200,241	80.7%	
Domestic S.S. & Small Public S.S.	2,489.66	6.82				143	47,806	19.3%	
Commercial-Industrial Self-supplied	398.85	1.09	1.81	1.37	1.30				
Recreational Irrigation	452.34	1.24							758
Power Generation	26,194.65	71.77	113.28	97.57	88.24				
Agricultural	1,913.33	5.24	N/A	N/A	N/A				N/A
Total	42,182.43	115.57					248,047		758

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	12,043.30	33.00	58.22	45.87	40.82	152	217,353	79.0%	
Domestic S.S. & Small Public S.S.	3,123.59	8.56				148	57,660	21.0%	
Commercial-Industrial Self-supplied	460.15	1.26	1.82	1.38	1.35				
Recreational Irrigation	498.53	1.37							891
Power Generation	22,841.70	62.58	98.59	84.96	76.99				
Agricultural	1,848.73	5.07	N/A	9.93	8.60				1,740

40,816.00 111.82 275,013 2,631 Total

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,443.61	36.83	64.94	51.35	45.61	152	243,041	80.0%	
Domestic S.S. & Small Public S.S.	3,277.91	8.98				147	60,944	20.0%	
Commercial-Industrial Self-supplied	478.40	1.31	1.84	1.47	1.43				
Recreational Irrigation	539.94	1.48							972
Power Generation	22,878.20	62.68	98.73	85.09	77.12				
Agricultural	1,872.46	5.13	N/A	9.40	8.25				1,579

2,551 42,490.51 116.41 303,985 Total

Region VII Summary

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	14,930.80	40.91	72.08	57.14	50.70	152	268,582	80.7%	
Domestic S.S. & Small Public S.S.	3,430.37	9.40				146	64,164	19.3%	
Commercial-Industrial Self-supplied	496.65	1.36	1.84	1.52	1.48				
Recreational Irrigation	586.13	1.61							1,053
Power Generation	22,914.70	62.78	98.87	85.22	77.25				
Agricultural	2,083.06	5.71	N/A	10.64	9.29				1,805
Total	44,441.71	121.76					332,746		2,858

2015 Water Use Projection

,		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	16.629.68	45.56	80.15	63.75	56.50	153	297.659	82.5%	inigated
11 7	-,		80.13	03.73	30.30		- ,		
Domestic S.S. & Small Public S.S.	3,330.86	9.13				144	63,272	17.5%	
Commercial-Industrial Self-supplied	505.78	1.39	1.84	1.55	1.51				
Recreational Irrigation	673.74	1.85							1,215
Power Generation	23,042.45	63.13	99.35	85.68	77.70				
Agricultural	2,195.12	6.01	N/A	10.96	9.62				1,832

Total 46,377.62 127.06 360,931 3,047

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	18,432.58	50.50	88.71	70.74	62.64	154	327,305	84.3%	
Domestic S.S. & Small Public S.S.	3,131.63	8.58				141	61,000	15.7%	
Commercial-Industrial Self-supplied	514.90	1.41	1.84	1.58	1.54				
Recreational Irrigation	715.15	1.96							1,296
Power Generation	23,170.20	63.48	99.83	86.14	78.15				
Agricultural	2,363.38	6.48	N/A	11.52	10.17				1,900

Total 48,327.84 132.41 388,305 3,196

Region VII Summary

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	29.41	33.00	36.83	40.91	45.56	50.50
Domestic S.S. & Small Public S.S.	6.82	8.56	8.98	9.40	9.13	8.58
Commercial-Industrial Self-supplied	1.09	1.26	1.31	1.36	1.39	1.41
Recreational Irrigation	1.24	1.37	1.48	1.61	1.85	1.96
Power Generation	71.77	62.58	62.68	62.78	63.13	63.48
Agricultural	10.54	5.07	5.13	5.71	6.01	6.48

Maximum Daily Flow in Mgal/d

maximam Bany Flow in mgara						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	47.14	58.22	64.94	72.08	80.15	88.71
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	1.81	1.82	1.84	1.84	1.84	1.84
Recreational Irrigation						
Power Generation	113.28	98.59	98.73	98.87	99.35	99.83
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	37.69	45.87	51.35	57.14	63.75	70.74
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	1.37	1.38	1.47	1.52	1.55	1.58
Recreational Irrigation						
Power Generation	97.57	84.96	85.09	85.22	85.68	86.14
Agricultural	N/A	9.93	9.40	10.64	10.96	11.52

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	34.14	40.82	45.61	50.70	56.50	62.64
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	1.30	1.35	1.43	1.48	1.51	1.54
Recreational Irrigation						
Power Generation	88.24	76.99	77.12	77.25	77.70	78.15
Agricultural	N/A	8.60	8.25	9.29	9.62	10.17

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	256.40	0.70	1.14	0.83	0.76	147	4,788	35.4%	
Domestic S.S. & Small Public S.S.	467.02	1.28				147	8,721	64.6%	
Commercial-Industrial Self-supplied	84.20	0.23	0.28	0.27	0.26				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,546.14	4.24	N/A	N/A	N/A				N/A
Total	2,423.04	6.64					13,509		122

2000 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	278.43	0.76	1.35	1.01	0.91	149	5,132	37.4%	
Domestic S.S. & Small Public S.S.	465.84	1.28				149	8,586	62.6%	
Commercial-Industrial Self-supplied	84.20	0.23	0.26	0.24	0.24				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,593.23	4.37	N/A	8.70	7.51				1,542

Total 2,490.98 6.82 13,718 1,664

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	300.64	0.82	1.46	1.09	0.98	143	5,773	39.7%	
Domestic S.S. & Small Public S.S.	456.23	1.25				143	8,761	60.3%	
Commercial-Industrial Self-supplied	84.20	0.23	0.28	0.27	0.26				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,600.53	4.39	N/A	8.09	7.09				1,368

Total 2,510.89 6.88 14,534 1,490

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	322.86	0.88	1.57	1.17	1.06	136	6,494	42.3%	
Domestic S.S. & Small Public S.S.	440.25	1.21				136	8,855	57.7%	
Commercial-Industrial Self-supplied	84.20	0.23	0.28	0.27	0.26				
Recreational Irrigation	69.28	0.19							122
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,784.12	4.89	N/A	9.20	8.02				1,573
Total	2,700.71	7.40					15,349		1,695

2015 Water Use Projection

2010 Water Oscillori									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	345.07	0.95	1.67	1.25	1.13	129	7,304	45.2%	
Domestic S.S. & Small Public S.S.	418.61	1.15				129	8,861	54.8%	
Commercial-Industrial Self-supplied	84.20	0.23	0.28	0.27	0.26				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	1,875.01	5.14	N/A	9.42	8.26				1,583

Total 2,815.27 7.71 16,165 1,745

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	367.29	1.01	1.78	1.33	1.20	122	8,216	48.4%	
Domestic S.S. & Small Public S.S.	391.79	1.07				122	8,764	51.6%	
Commercial-Industrial Self-supplied	84.20	0.23	0.28	0.27	0.26				
Recreational Irrigation	92.38	0.25							162
Power Generation	0.00	0.00	0.00	0.00	0.00				
Agricultural	2,013.34	5.52	N/A	9.84	8.68				1,628

Total 2,949.00 8.08 16,980 1,790

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.70	0.76	0.82	0.88	0.95	1.01
Domestic S.S. & Small Public S.S.	1.28	1.28	1.25	1.21	1.15	1.07
Commercial-Industrial Self-supplied	0.23	0.23	0.23	0.23	0.23	0.23
Recreational Irrigation	0.19	0.19	0.19	0.19	0.25	0.25
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	9.04	4.37	4.39	4.89	5.14	5.52

Maximum Daily Flow in Mgal/d

, 3						
Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.14	1.35	1.46	1.57	1.67	1.78
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.28	0.26	0.28	0.28	0.28	0.28
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.83	1.01	1.09	1.17	1.25	1.33
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.27	0.24	0.27	0.27	0.27	0.27
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	8.70	8.09	9.20	9.42	9.84

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	0.76	0.91	0.98	1.06	1.13	1.20
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.26	0.24	0.26	0.26	0.26	0.26
Recreational Irrigation						
Power Generation	0.00	0.00	0.00	0.00	0.00	0.00
Agricultural	N/A	7.51	7.09	8.02	8.26	8.68

County Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.77	1.77	1.77	1.77	1.77
Peak Month	1.32	1.32	1.32	1.32	1.32
Peak 3 Month	1.20	1.20	1.20	1.20	1.20

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Monticello (GEO)	256.4	278.43	300.64	322.86	345.07	367.29

Public Supply: Projected Average Daily Flow in Mgal/d

	, , , , , , , , , , , , , , , , , , , 					
Year	1995	2000	2005	2010	2015	2020
Monticello (GEO)	0.70	0.76	0.82	0.88	0.95	1.01

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Monticello	1.77	1.32	1.20

Public Supply: Projected Maximum Daily Flow in Mgal/d

ability of the state of the sta								
Year	2000	2005	2010	2015	2020			
Monticello	1.35	1.46	1.57	1.67	1.78			

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Monticello	1.01	1.09	1.17	1.25	1.33

Public Supply: Projected Peak 3 Month in Mgal/d

117					
Year	2000	2005	2010	2015	2020
Monticello	0.91	0.98	1.06	1.13	1.20

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Monticello	37.4%	39.7%	42.3%	45.2%	48.4%

Population Served by Utility

Year	2000	2005	2010	2015	2020
Monticello	5,132	5,773	6,494	7,304	8,216

Total County Population

Year	2000	2005	2010	2015	2020
Population	13,718	14,534	15,349	16,165	16,980

Self-supplied Domestic Population

Year	2000	2005	2010	2015	2020
	8,586	8,761	8,855	8,861	8,764

Self-supplied Domestic: Projected Annual Flow in Mgal/yr

			,		
Year	2000	2005	2010	2015	2020
	386.21	348.32	314.80	280.51	249.30

Self-supplied Domestic: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
	1.06	0.95	0.86	0.77	0.68

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Total	84.20	84.20	84.20	84.20	84.20

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Total	0.23	0.23	0.23	0.23	0.23

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Total	0.28	0.28	0.28	0.28	0.28

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Total	0.27	0.27	0.27	0.27	0.27

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Total	0.26	0.26	0.26	0.26	0.26

Golf Course Projections

Base Year: 1995		Projected: 2000-2020 Water Use in Mgal					
Total Population	13,509			Total	Number of	Acres	Total
Total Number of Holes	27		Year	Population	Holes	Irrigated	Water Use
Holes Per Person	0.0019987		2000	13,718	27	122	69.28
Total Number Acres Irrigated	122		2005	14,534	27	122	69.28
Inches Per Acre	21		2010	15,349	27	122	69.28
Total Water Use in Mgal	69.28		2015	16,165	36	162	92.38
Water Use Per Hole in Mgal	2.57		2020	16,980	36	162	92.38

Golf Course Name Holes Location

Jefferson County Country Club	9	SR #149, Monticello, 32344
Tartaruga Creek Golf Club	18	

Total 27

Leon County Summary

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	10,094.80	27.66	43.89	35.43	32.03	148	186,440	85.7%	
Domestic S.S. & Small Public S.S.	1,683.53	4.61				148	31,093	14.3%	
Commercial-Industrial Self-supplied	83.95	0.23	0.26	0.25	0.24				
Recreational Irrigation	346.42	0.95							555
Power Generation	962.20	2.64	3.71	3.56	3.42				
Agricultural	367.19	1.01	N/A	N/A	N/A				N/A
Total	13,538.09	37.09					217,533		555

2000 Water Use Projection

2000 11400 000 11900001									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	11,281.42	30.91	54.03	43.01	38.16	153	202,032	83.7%	
Domestic S.S. & Small Public S.S.	2,191.15	6.00				153	39,240	16.3%	
Commercial-Industrial Self-supplied	83.95	0.23	0.26	0.25	0.24				
Recreational Irrigation	392.61	1.08							689
Power Generation	1,058.50	2.90	3.99	3.80	3.76				
Agricultural	255.50	0.70	N/A	1.23	1.09				198

Total 15,263.13 41.82 241,272 887

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	12,565.86	34.43	60.09	48.05	42.54	153	225,270	84.7%	
Domestic S.S. & Small Public S.S.	2,263.08	6.20				153	40,571	15.3%	
Commercial-Industrial Self-supplied	83.95	0.23	0.26	0.25	0.24				
Recreational Irrigation	415.70	1.14							729
Power Generation	1,095.00	3.00	4.13	3.93	3.89				
Agricultural	271.93	0.75	N/A	1.31	1.16				211

Total 16,695.52 45.74 265,840 940

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	13,937.53	38.19	66.57	53.41	47.22	154	248,008	85.7%	
Domestic S.S. & Small Public S.S.	2,334.85	6.40				154	41,547	14.3%	
Commercial-Industrial Self-supplied	83.95	0.23	0.26	0.25	0.24				
Recreational Irrigation	461.89	1.27							810
Power Generation	1,131.50	3.10	4.27	4.06	4.02				
Agricultural	298.94	0.82	N/A	1.44	1.27				232
Total	18,248.66	50.00					289,555		1,042

2015 Water Use Projection

ĺ		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	15,522.36	42.53	73.98	59.58	52.61	155	273,832	87.8%	
Domestic S.S. & Small Public S.S.	2,159.87	5.92				155	38,103	12.2%	
Commercial-Industrial Self-supplied	83.95	0.23	0.26	0.25	0.24				
Recreational Irrigation	508.08	1.39							891
Power Generation	1,259.25	3.45	4.75	4.52	4.47				
Agricultural	320.11	0.88	N/A	1.54	1.36				249

2020 Water Use Projection

19,853.61

Total

54.39

	Average	Maximum	Peak	Peak 3				Total
Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
17,211.58	47.16	81.89	66.15	58.35	157	299,654	90.1%	
1,892.93	5.19				157	32,956	9.9%	
83.95	0.23	0.26	0.25	0.24				
531.17	1.46							932
1,387.00	3.80	5.23	4.98	4.92				
350.04	0.96	N/A	1.68	1.49				272
	in Mgal 17,211.58 1,892.93 83.95 531.17 1,387.00	Total Flow in Mgal in Mgal/d 17,211.58 47.16 1,892.93 5.19 83.95 0.23 531.17 1.46 1,387.00 3.80	Total Flow in Mgal Daily Flow in Mgal/d in Mgal/d Daily Flow in Mgal/d 17,211.58 47.16 81.89 1,892.93 5.19 83.95 0.23 0.26 531.17 1.46 1,387.00 3.80 5.23	Total Flow in Mgal Daily Flow in Mgal/d in Mga	Total Flow in Mgal Daily Flow in Mgal/d in Mga	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d 17,211.58 47.16 81.89 66.15 58.35 157 1,892.93 5.19 51.9 157 83.95 0.23 0.26 0.25 0.24 531.17 1.46 4.98 4.92	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Month in Mgal/d Per Capita in gal/d Population Served 17,211.58 47.16 81.89 66.15 58.35 157 299,654 1,892.93 5.19 531.17 157 32,956 83.95 0.23 0.26 0.25 0.24 531.17 1.46 4.98 4.92	Total Flow in Mgal Daily Flow in Mgal/d Daily Flow in Mgal/d Month in Mgal/d Per Capita in Mgal/d Population Served Population Served 17,211.58 47.16 81.89 66.15 58.35 157 299,654 90.1% 1,892.93 5.19 5.19 157 32,956 9.9% 83.95 0.23 0.26 0.25 0.24 531.17 1.46 1,387.00 3.80 5.23 4.98 4.92 5.90 5.90

Total 21,456.67 58.79 332,610 1,204

311,934

1,140

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	27.66	30.91	34.43	38.19	42.53	47.16
Domestic S.S. & Small Public S.S.	4.61	6.00	6.20	6.40	5.92	5.19
Commercial-Industrial Self-supplied	0.23	0.23	0.23	0.23	0.23	0.23
Recreational Irrigation	0.95	1.08	1.14	1.27	1.39	1.46
Power Generation	2.64	2.90	3.00	3.10	3.45	3.80
Agricultural	1.08	0.70	0.75	0.82	0.88	0.96

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	43.89	54.03	60.09	66.57	73.98	81.89
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.26	0.26	0.26	0.26	0.26	0.26
Recreational Irrigation						
Power Generation	3.71	3.99	4.13	4.27	4.75	5.23
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	35.43	43.01	48.05	53.41	59.58	66.15
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.25	0.25	0.25	0.25	0.25	0.25
Recreational Irrigation						
Power Generation	3.56	3.80	3.93	4.06	4.52	4.98
Agricultural	N/A	1.23	1.31	1.44	1.54	1.68

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	32.03	38.16	42.54	47.22	52.61	58.35
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.24	0.24	0.24	0.24	0.24	0.24
Recreational Irrigation						
Power Generation	3.42	3.76	3.89	4.02	4.47	4.92
Agricultural	N/A	1.09	1.16	1.27	1.36	1.49

County Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	1.75	1.75	1.74	1.74	1.74
Peak Month	1.39	1.40	1.40	1.40	1.40
Peak 3 Month	1.23	1.24	1.24	1.24	1.24

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
City of Tallahassee (GEO)	9243.00	9,994.07	10,926.28	11,945.72	13,059.70	14,278.07
Bradfordville Regional (LIN)	289.00	397.12	508.45	620.14	731.46	843.15
Meadows At Woodrun (LIN)	116.30	142.72	175.20	207.32	239.81	271.93
Pine Ridge Estates (UTIL)	20.70	254.77	395.30	535.82	794.97	1,054.12
Lake Jackson Area W/S (LIN)	425.80	492.75	560.64	628.53	696.42	764.31
Total	10,094.80	11,281.42	12,565.86	13,937.53	15,522.36	17,211.58

Public Supply: Projected Average Daily Flow in Mgal/d

	,					
Year	1995	2000	2005	2010	2015	2020
City of Tallahassee (GEO)	25.32	27.38	29.94	32.73	35.78	39.12
Bradfordville Regional (LIN)	0.79	1.09	1.39	1.70	2.00	2.31
Meadows At Woodrun (LIN)	0.32	0.39	0.48	0.57	0.66	0.75
Pine Ridge Estates (UTIL)	0.06	0.70	1.08	1.47	2.18	2.89
Lake Jackson Area W/S (LIN)	1.17	1.35	1.54	1.72	1.91	2.09
Total	27.66	30.91	34.43	38.19	42.53	47.16

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
City of Tallahassee (GEO)	1.76	1.36	1.22
Bradfordville Regional (LIN)	1.78	1.96	1.38
Meadows At Woodrun (LIN)	1.78	1.49	1.26
Pine Ridge Estates (UTIL)	1.46	1.42	1.23
Lake Jackson Area W/S (LIN)	1.62	1.49	1.33

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
City of Tallahassee (GEO)	48.19	52.69	57.60	62.97	68.85
Bradfordville Regional (LIN)	1.94	2.48	3.02	3.57	4.11
Meadows At Woodrun (LIN)	0.70	0.85	1.01	1.17	1.33
Pine Ridge Estates (UTIL)	1.02	1.58	2.14	3.18	4.22
Lake Jackson Area W/S (LIN)	2.19	2.49	2.79	3.09	3.39
Total	54.03	60.09	66.57	73.98	81.89

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
City of Tallahassee (GEO)	37.29	40.77	44.58	48.73	53.28
Bradfordville Regional (LIN)	2.13	2.73	3.33	3.92	4.52
Meadows At Woodrun (LIN)	0.58	0.71	0.85	0.98	1.11
Pine Ridge Estates (UTIL)	0.99	1.54	2.09	3.10	4.11
Lake Jackson Area W/S (LIN)	2.02	2.29	2.57	2.85	3.13
Total	43.01	48.05	53.41	59.58	66.15

Public Supply: Projected Peak 3 Month in Mgal/d

· ····································							
Year	2000	2005	2010	2015	2020		
City of Tallahassee (GEO)	33.51	36.64	40.06	43.79	47.88		
Bradfordville Regional (LIN)	1.51	1.93	2.35	2.77	3.20		
Meadows At Woodrun (LIN)	0.49	0.60	0.72	0.83	0.94		
Pine Ridge Estates (UTIL)	0.86	1.33	1.81	2.68	3.56		
Lake Jackson Area W/S (LIN)	1.79	2.04	2.28	2.53	2.78		
Total	38.16	42.54	47.22	52.61	58.35		

Percent Served by Public Supply

Year	2000	2005	2010	2015	2020
Leon County	84%	85%	86%	88%	90%

Population Served by Utility

Supplier	1995	2000	2005	2010	2015	2020
City of Tallahassee (GEO)	165773	176,665	193,618	210,571	227,524	244,476
Bradfordville Regional (LIN)	4280	5,619	6,383	6,665	6,759	6,788
Meadows At Woodrun (LIN)	2205	2,893	3,743	4,714	5,826	7,098
Pine Ridge Estates (UTIL)	5347	6,974	10,827	14,679	21,778	28,876
Lake Jackson Area W/S (LIN)	8835	9,881	10,699	11,379	11,945	12,416
Total	186,440	202,032	225,270	248,008	273,832	299,654

Total County Population

Year	2000	2005	2010	2015	2020
Population	241,272	265,840	289,555	311,934	332,610

Self-supplied Domestic Population

Year	2000	2005	2010	2015	2020
	39,240	40,571	41,547	38,103	32,956

Self-supplied Domestic: Projected Annual Flow in Mgal/yr

con supplied Bollicotte: 1 rejected 7 tillidal 1 low in Mga#y1									
Year	2000	2005	2010	2015	2020				
	2,191.15	2,263.08	2,334.85	2,159.87	1,892.93				

Self-supplied Domestic: Projected Average Daily Flow in Mgal/d

		, -	9		
Year	2000	2005	2010	2015	2020
	6.00	6.20	6.40	5.92	5.19

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Total	83.95	83.95	83.95	83.95	83.95

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Total	0.23	0.23	0.23	0.23	0.23

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Total	0.26	0.26	0.26	0.26	0.26

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Total	0.25	0.25	0.25	0.25	0.25

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Total	0.24	0.24	0.24	0.24	0.24

Golf Course Projections

Base Year: 1995		Projected: 2000-2020 Water Use in Mgal					
Total Population	217,533		Total	Number of	Acres	Total	
Total Number of Holes	135	Year	Population	Holes	Irrigated	Water Use	
Holes Per Person	0.0006206	2000	241,272	153	689	392.61	
Total Number Acres Irrigated	608	2005	265,840	162	729	415.70	
Inches Per Acre	21	2010	289,555	180	810	461.89	
Total Water Use in Mgal	346.42	2015	311,934	198	891	508.08	
Water Use Per Hole in Mgal	2.57	2020	332,610	207	932	531.17	

Golf Course Name Holes Location

Capital City Golf & Country Clu	18	Golf Terrace Drive, Tallahassee, 32301
Cross Creek GC	9	Tallahassee
Gaither Park GC	9	Tallahassee
Golden Eagle Golf & Country C	18	Golden Eagle Dr., Tallahassee, 32312
Hilaman Park Golf Club	18	Myer Park Drive, Tallahassee
Killearn Golf & CC (1)	18	100 Tyron Circle, Tallahassee, 32308
Killearn Golf & CC (2)	9	100 Tyron Circle, Tallahassee, 32308
Seminole Golf Club	18	2550 Pottsdamer Street, Tallahassee, 32304
Summerbrooke Golf & CC	18	Summerbrooke Drive, Tallahassee, 32312

Total 135

Power Generation: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Total	1058.50	1095.00	1131.50	1259.25	1387.00

Power Generation: Projected Average Daily Flow (Mgal/d)

Year	2000	2005	2010	2015	2020
Total	2.90	3.00	3.10	3.45	3.80

Power Generation: Ratios

Maximum	Peak	Peak 3
Day	Month	Month
1.38	1.31	1.30

Power Generation: Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Total	3.99	4.13	4.27	4.75	5.23

Power Generation: Projected Peak Month

Year	2000	2005	2010	2015	2020
Total	3.80	3.93	4.06	4.52	4.98

Power Generation: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Total	3.76	3.89	4.02	4.47	4.92

1995 Water Use Estimate

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	382.40	1.05	2.11	1.43	1.35	116	9,013	53.0%	
Domestic S.S. & Small Public S.S.	339.11	0.93				116	7,992	47.0%	
Commercial-Industrial Self-supplied	230.70	0.63	1.27	0.85	0.80				
Recreational Irrigation	36.64	0.10							81
Power Generation	25,232.45	69.13	109.57	94.01	84.82				
Agricultural	0.00	0.00	N/A	N/A	N/A				N/A
Total	26,221.30	71.84					17,005		81

2000 Water Use Projection

2000 Water Doo'l Tojootion									
		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	483.45	1.32	2.84	1.85	1.75	130	10,189	50.9%	
Domestic S.S. & Small Public S.S.	466.60	1.28				130	9,834	49.1%	
Commercial-Industrial Self-supplied	292.00	0.80	1.30	0.89	0.87				
Recreational Irrigation	36.64	0.10							81
Power Generation	21,783.20	59.68	94.60	81.16	73.23				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total

23,061.89

63.18

20,023

2005 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	577.11	1.58	3.39	2.21	2.09	132	11,998	50.8%	
Domestic S.S. & Small Public S.S.	558.59	1.53				132	11,613	49.2%	
Commercial-Industrial Self-supplied	310.25	0.85	1.30	0.95	0.93				
Recreational Irrigation	54.96	0.15							122
Power Generation	21,783.20	59.68	94.60	81.16	73.23				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 23,284.11 63.79

23,611

122

81

2010 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	670.41	1.84	3.95	2.57	2.43	130	14,080	50.6%	
Domestic S.S. & Small Public S.S.	655.27	1.80				130	13,762	49.4%	
Commercial-Industrial Self-supplied	328.50	0.90	1.30	1.00	0.98				
Recreational Irrigation	54.96	0.15							122
Power Generation	21,783.20	59.68	94.60	81.16	73.23				
Agricultural	0.00	0.00	N/A	0.00	0.00				0
Total	23,492.34	64.36					27,842		122

2015 Water Use Projection

2010 Water OSC Frojection		Average	Maximum	Peak	Peak 3				Total
		Average	Maximum						rotai
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	762.25	2.09	4.49	2.92	2.76	126	16,523	50.3%	
Domestic S.S. & Small Public S.S.	752.38	2.06				126	16,309	49.7%	
Commercial-Industrial Self-supplied	337.63	0.93	1.30	1.03	1.01				
Recreational Irrigation	73.28	0.20							162
Power Generation	21,783.20	59.68	94.60	81.16	73.23				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 23,708.74 64.96 32,832 162

2020 Water Use Projection

		Average	Maximum	Peak	Peak 3				Total
	Total Flow	Daily Flow	Daily Flow	Month	Month	Per Capita	Population	Percent	Acres
Use Category	in Mgal	in Mgal/d	in Mgal/d	in Mgal/d	in Mgal/d	in gal/d	Served	Population Served	Irrigated
Public Supply	853.72	2.34	5.04	3.27	3.09	120	19,435	50.2%	
Domestic S.S. & Small Public S.S.	846.91	2.32				120	19,280	49.8%	
Commercial-Industrial Self-supplied	346.75	0.95	1.30	1.06	1.04				
Recreational Irrigation	91.60	0.25							203
Power Generation	21,783.20	59.68	94.60	81.16	73.23				
Agricultural	0.00	0.00	N/A	0.00	0.00				0

Total 23,922.17 65.54 38,715 203

Average Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.05	1.32	1.58	1.84	2.09	2.34
Domestic S.S. & Small Public S.S.	0.93	1.28	1.53	1.80	2.06	2.32
Commercial-Industrial Self-supplied	0.63	0.80	0.85	0.90	0.93	0.95
Recreational Irrigation	0.10	0.10	0.15	0.15	0.20	0.25
Power Generation	69.13	59.68	59.68	59.68	59.68	59.68
Agricultural	0.42	1	-	-	-	-

Maximum Daily Flow in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	2.11	2.84	3.39	3.95	4.49	5.04
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	1.27	1.30	1.30	1.30	1.30	1.30
Recreational Irrigation						
Power Generation	109.57	94.60	94.60	94.60	94.60	94.60
Agricultural	N/A	N/A	N/A	N/A	N/A	N/A

Peak Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.43	1.85	2.21	2.57	2.92	3.27
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.85	0.89	0.95	1.00	1.03	1.06
Recreational Irrigation						
Power Generation	94.01	81.16	81.16	81.16	81.16	81.16
Agricultural	N/A	-	-	-	-	-

Peak Three Month in Mgal/d

Use Category	1995	2000	2005	2010	2015	2020
Public Supply	1.35	1.75	2.09	2.43	2.76	3.09
Domestic S.S. & Small Public S.S.						
Commercial-Industrial Self-supplied	0.80	0.87	0.93	0.98	1.01	1.04
Recreational Irrigation						
Power Generation	84.82	73.23	73.23	73.23	73.23	73.23
Agricultural	N/A	1	-	-	-	-

County Ratios

Year	2000	2005	2010	2015	2020
Maximum Daily Flow	2.14	2.15	2.15	2.15	2.15
Peak Month	1.40	1.40	1.40	1.40	1.40
Peak 3 Month	1.32	1.32	1.32	1.32	1.32

Public Supply: Projected Annual Flow in Mgal/yr

Year	1995	2000	2005	2010	2015	2020
Gulf Coast W/S (LIN)	102.30	163.52	202.94	242.36	281.78	321.20
Panacea Area W/S (MOD EXP)	83.50	88.33	92.35	95.63	97.82	99.28
Saint Marks (LIN)	37.00	49.46	61.73	74.00	86.27	98.53
Sopchoppy (LIN)	159.60	182.14	220.10	258.42	296.38	334.71
Total	382.40	483.45	577.11	670.41	762.25	853.72

Public Supply: Projected Average Daily Flow in Mgal/d

	<u> </u>					
Year	1995	2000	2005	2010	2015	2020
Gulf Coast W/S (LIN)	0.28	0.45	0.56	0.66	0.77	0.88
Panacea Area W/S (MOD EXP)	0.23	0.24	0.25	0.26	0.27	0.27
Saint Marks (LIN)	0.10	0.14	0.17	0.20	0.24	0.27
Sopchoppy (LIN)	0.44	0.50	0.60	0.71	0.81	0.92
Total	1.05	1.32	1.58	1.84	2.09	2.34

Public Supply Ratios

	Maximum	Peak	Peak 3
	Day	Month	Month
Gulf Coast W/S (LIN)	2.36	1.43	1.43
Panacea Area W/S (MOD EXP)	2.04	1.39	1.27
Saint Marks (GEO)	1.95	1.21	1.10
Sopchoppy (LIN)	2.05	1.43	1.30

Public Supply: Projected Maximum Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Gulf Coast W/S (LIN)	1.06	1.31	1.57	1.82	2.08
Panacea Area W/S (MOD EXP)	0.49	0.52	0.53	0.55	0.55
Saint Marks (GEO)	0.26	0.33	0.40	0.46	0.53
Sopchoppy (LIN)	1.02	1.24	1.45	1.66	1.88
Total	2.84	3.39	3.95	4.49	5.04

Public Supply: Projected Peak Month in Mgal/d

Year	2000	2005	2010	2015	2020
Gulf Coast W/S (LIN)	0.64	0.79	0.95	1.10	1.25
Panacea Area W/S (MOD EXP)	0.34	0.35	0.36	0.37	0.38
Saint Marks (GEO)	0.16	0.20	0.25	0.29	0.33
Sopchoppy (LIN)	0.71	0.86	1.01	1.16	1.31
Total	1.85	2.21	2.57	2.92	3.27

Public Supply: Projected Peak 3 Month in Mgal/d

Year	2000	2005	2010	2015	2020
Gulf Coast W/S (LIN)	0.64	0.79	0.95	1.10	1.26
Panacea Area W/S (MOD EXP)	0.31	0.32	0.33	0.34	0.35
Saint Marks (GEO)	0.15	0.19	0.22	0.26	0.30
Sopchoppy (LIN)	0.65	0.79	0.92	1.06	1.19
Total	1.75	2.09	2.43	2.76	3.09

Percent Served by Public Supply

	,				
Year	2000	2005	2010	2015	2020
Wakulla County	51%	51%	51%	50%	50%

Population Served by Utility

Supplier	2000	2005	2010	2015	2020
Gulf Coast W/S (LIN)	3,529	4,548	5,860	7,552	9,733
Panacea Area W/S (MOD EXP)	2,558	2,722	2,865	2,987	3,089
Saint Marks (GEO)	548	571	595	621	647
Sopchoppy (LIN)	3,554	4,157	4,760	5,363	5,966
Total	10,189	11,998	14,080	16,523	19,435

Total County Population

Year	2000	2005	2010	2015	2020
Total	20,023	23,611	27,842	32,832	38,715

Self-supplied Domestic Population

Year	2000	2005	2010	2015	2020
Total	9,834	11,613	13,762	16,309	19,280

Self-supplied Domestic: Projected Annual Flow in Mgal/yr

			,		
Year	2000	2005	2010	2015	2020
Total	466.60	558.59	655.27	752.38	346.75

Self-supplied Domestic: Projected Average Daily Flow in Mgal/d

Year	2000	2005	2010	2015	2020
Total	1.28	1.53	1.80	2.06	0.95

Commercial-Industrial: Projected Total Annual Flow

Year	2000	2005	2010	2015	2020
Primex	292.00	310.25	328.50	337.63	346.75

Commercial-Industrial: Projected Average Daily Flow in Mgal/d

		, ,	3		
Year	2000	2005	2010	2015	2020
Primex	0.80	0.85	0.90	0.93	0.95

Commercial-Industrial: Projected Max Day

Year	2000	2005	2010	2015	2020
Primex	1.30	1.30	1.30	1.30	1.30

Commercial-Industrial: Projected Peak Month

Year	2000	2005	2010	2015	2020
Primex	0.89	0.95	1.00	1.03	1.06

Commercial-Industrial: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Primex	0.87	0.93	0.98	1.01	1.04

Golf Course Projections

Base Year: 1995			Projected: 2000-2020 Water Use in Mgal						
Total Population	17,005			Total	Number of	Acres	Total		
Total Number of Holes	18		Year	Population	Holes	Irrigated	Water Use		
Holes Per Person	0.0010585		2000	20,023	18	81	36.64		
Total Number Acres Irrigated	81		2005	23,611	27	122	54.96		
Inches Per Acre	21		2010	27,842	27	122	54.96		
Total Water Use in Mgal	36.64		2015	32,832	36	162	73.28		
Water Use Per Hole in Mgal	2.04		2020	38,715	45	203	91.60		

Golf Course Name		Holes	Location
Wildwood Country Club		18	
	Total	18	

Power Generation: Projected Annual Flow

Year	2000	2005	2010	2015	2020
Total	21,783.2	21,783.2	21,783.2	21,783.2	21,783.2

Power Generation: Projected Average Daily Flow (Mgal/d)

		- (3	,		
Year	2000	2005	2010	2015	2020
Total	59.68	59.68	59.68	59.68	59.68

Power Generation: Projected Max Day

Year	2000	2005	2010	2015	2020
Total	94.60	94.60	94.60	94.60	94.60

Power Generation: Projected Peak Month

Year	2000	2005	2010	2015	2020
Total	81.16	81.16	81.16	81.16	81.16

Power Generation: Projected 3 Month Peak

Year	2000	2005	2010	2015	2020
Total	73.23	73.23	73.23	73.23	73.23

Appendix 10.

Planning Region VII

c. Individually Projected Users

Projections in Mgal/d

County	Utility/Owner	Plant/facility	ASC	Use	2000	2005	2010	2015	2020
Jefferson	Monticello, city of			PS	0.76	0.82	0.88	0.95	1.01
Leon	Tallahassee, city of	Main & Woodville		PS	27.38	29.94	32.73	35.78	39.12
Leon	Talquin Electric Coop	Bradfordville Regional		PS	1.09	1.39	1.70	2.00	2.31
Leon	Talquin Electric Coop	Lake Jackson Regiona	al	PS	1.35	1.54	1.72	1.91	2.09
Leon	Talquin Electric Coop	Meadows at Wood Ru	ın	PS	0.39	0.48	0.57	0.66	0.75
Leon	Talquin Electric Coop	Pineridge Estates		PS	0.70	1.08	1.47	2.18	2.89
Leon	Tallahassee, City of	Hopkins Power Plant		PWR	2.90	3.00	3.10	3.45	3.80
Wakulla	Primex Technologies	Primex Corporation		C-I	0.80	0.85	0.90	0.93	0.95
Wakulla	Panacea Water System			PS	0.24	0.25	0.26	0.27	0.27
Wakulla	Sopchoppy, Town of			PS	0.50	0.60	0.71	0.81	0.92
Wakulla	St. Marks, Town of			PS	0.14	0.17	0.20	0.24	0.27
Wakulla	Talquin Electric Coop	Gulf Coast		PS	0.45	0.56	0.66	0.77	0.88
Wakulla	Tallahassee, City of	Pudom Power Plant		PWR	59.68	59.68	59.68	59.68	59.68

Use type; C-I, Commercial; Ind., Industrial; PWR, Power generation; PS, Public supply; SPS, Small public supply; R-I, Recreational irrigation. Other abbreviations; ASC, Area of Special Concern; SB, Stand by use.